

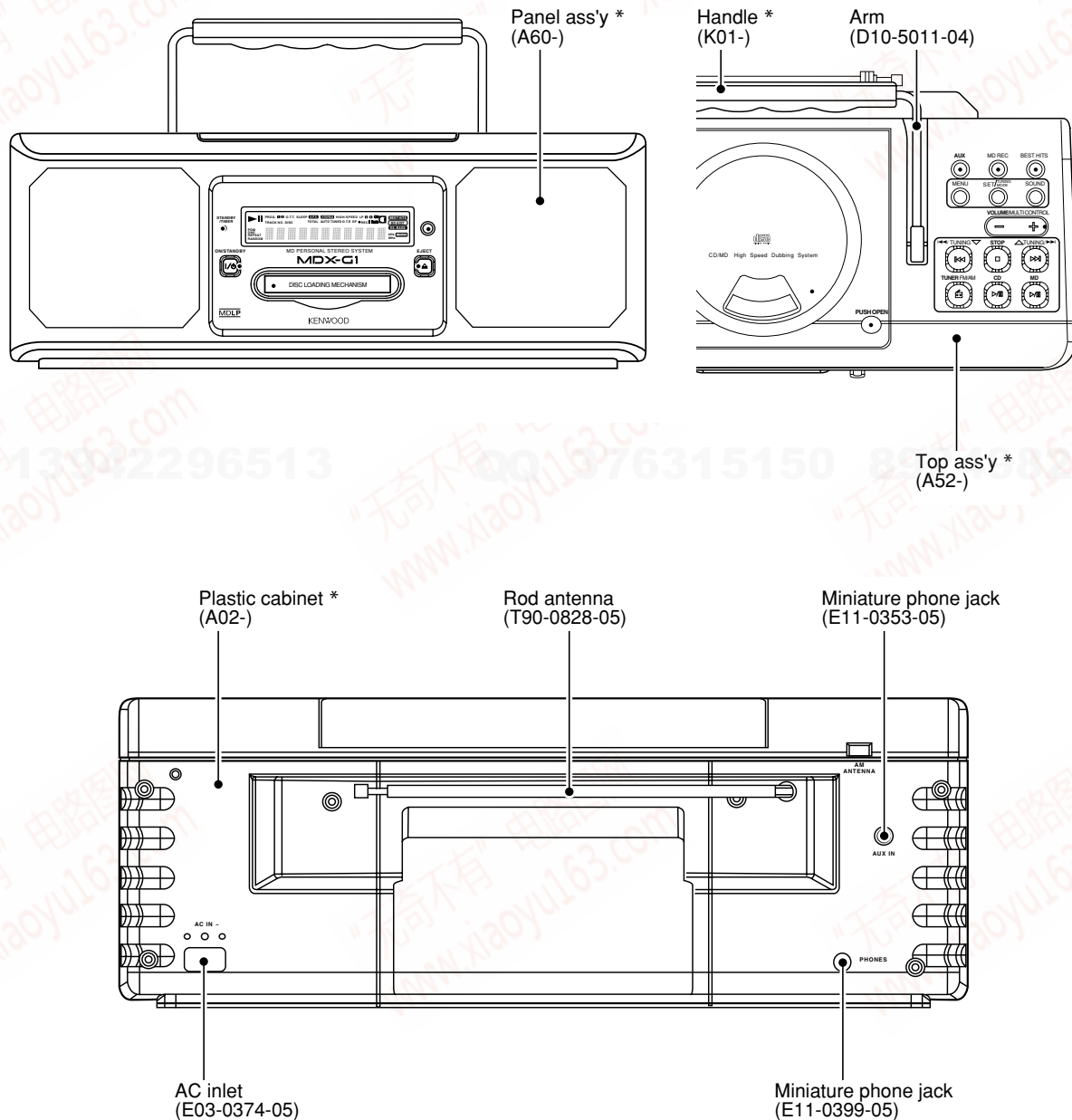
MDX-G1

SERVICE MANUAL

KENWOOD

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B51-5734-00 (K/K) 481

Note: Please contact KENWOOD service in your side if you want to get the AC power cord.



MDX-G1 has 3color; W: White, S: Silver, Y: Yellow

In compliance with Federal Regulations, following are reproduction of labels on, or inside the product relating to laser product safety.

*** Refer to parts list on page 25 .**

KENWOOD-Crop. certifies this equipment conforms to DHHS Regulations No.21 CFR 1040. 10, Chapter 1, Subchapter J.

**DANGER : Laser radiation when open and interlock defeated.
AVOID DIRECT EXPOSURE TO BEAM.**



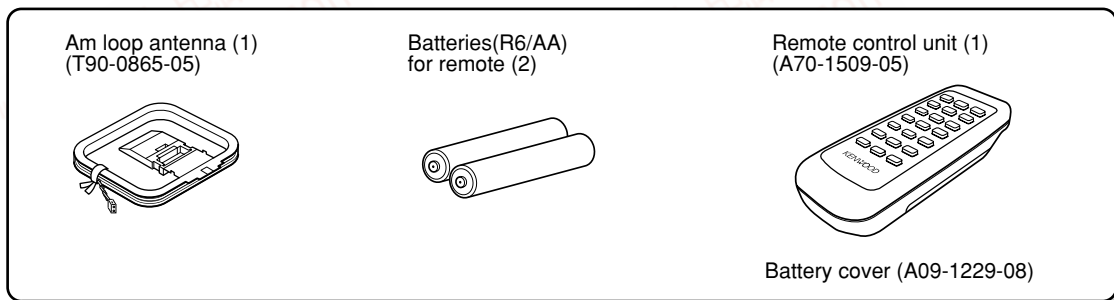
MDX-G1

CONTENTS / ACCESSORIES / CAUTIONS

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Accessories

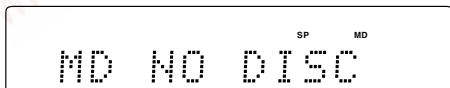


Cautions

Note related to transportation and movement

Before transporting or moving this unit, carry out the following operations.

- (1) Remove the CD or MD from the unit.
- (2) Press the ►/■ key of the MD.
- (3) Wait for some time and verify that the display becomes as shown in the figure.



- (4) Press the ►/■ key of the CD.
- (5) Wait for some time and verify that the display becomes as shown in the figure.



- (6) Wait a few seconds and turn the unit OFF.

Operation to reset

The microcomputer may fall into malfunction when a cord is unplugged and plugged again while the unit is ON or due to an external cause. In such a case, the microcomputer should be reset as described below:
Unplug the power cord from the wall outlet and, while holding the ON/STANDBY I/⏻ key depressed, plug the power cord again. This initializes the microcomputer. Note that this clears the previously stored memory.

The marking of products using lasers (Except for some areas)

**CLASS 1
LASER PRODUCT**

The marking is located on the rear panel and says this product has been classified as Class 1. It means that there is no danger of hazardous radiation outside the product

CAUTION
INVISIBLE LASER RADIATION
WHEN OPEN. AVOID EXPOSURE
TO BEAM.

Inside this laser product, laser diodes classified as Class 3A and 3B laser radiation are contained as alerted by the internal caution label shown above. To avoid exposure to laser beams, do not open the cover.

CIRCUIT DESCRIPTION

1. Initializing

1-1 Initialization Method

- While pressing the [ON/STANDBY] key, turn the AC on.

1-2 Initialization Operation

- During the initial operation, the display shows "INITIALIZE" and after that it will be returned to standby condition.
- If any mechanisms error occurred, the error indication is displayed as "ERR" on the display.

1-3 Mechanism Initialization

- ① CD Mechanism
 - If a mechanism error occurred, the error indication is displayed as "C ERR" on the display.
- ② MD Mechanism
 - If a mechanism error occurred, the error indication is displayed as "M ERR" on the display.
 - The disc will be unloaded from MD mechanism automatically, if a disc is its in.

2. Tuner Destination

Set	Destination	Band	Receiving Frequency Range	Channel Space	IF	RF
M	E1	FM	87.5MHz~108.0MHz	50kHz	+10.7MHz	25kHz
		AM	531kHz~1602kHz	9kHz	+450kHz	9kHz

3. Tuner Preset Frequency

P.CH	Band	Frequency	P.CH	Band	Frequency
1	FM	98.30MHz	11	AM	630kHz
2	FM	87.50MHz	12	AM	1440kHz
3	FM	92.00MHz	13	FM	106.0MHz
4	FM	108.00MHz	14	AM	531kHz
5	FM	89.10MHz	15	FM	87.50MHz
6	FM	90.00MHz	16	FM	98.00MHz
7	FM	87.50MHz	17	FM	98.50MHz
8	FM	87.50MHz	18	FM	87.50MHz
9	AM	1602kHz	19	AM	990kHz
10	AM	999kHz	20	FM	97.70MHz

4-4 CD Test Mode

KEYS	DISPLAY	OPERATION
CD-PLAY/PAUSE (Cyclically changed the mode 05 and 03 by pressing the key.)	05 * : * : *	• Tracking-servo on.
	(* : * : *)Time Display	
CD STOP (Cyclically changed in the stop mode only.)	03 --:--	• Tracking-servo off.
	01 --:--	• Stop the CD operation.
	07 FG/FE	Adjustment value/mean value
	08 FB/FO	FG value/FE value
	09 TG/TE	FB value/FO value
SKIP UP/SKIP DOWN	10 TB/TO	TG value/TE value
		TB value/TO value
Usual Indication		• Track No up or down.
SKIP UP	Ex.Tno. 01→Tno. 02	• Play the first track No. in the stop mode.
SKIP DOWN	Usual Indication	• Play the last track No. in the stop mode.
*SKIP UP	FF	• CD FF search.
*SKIP DOWN		• The pickup travels outward in the stop mode.
	FB	• CD FB search.
MENU		• The pickup travels inward in the stop mode.
	HI-SPEED	• Hi speed playback ⇄ Normal speed playback
	NR-SPEED	

* Keep to press the key more than 400ms.

P.CH	Band	Frequency	P.CH	Band	Frequency
21	AM	531kHz	26	FM	87.50MHz
22	FM	87.50MHz	27	FM	87.50MHz
23	FM	87.50MHz	28	FM	87.50MHz
24	FM	87.50MHz	29	FM	108.0MHz
25	FM	87.50MHz	30	AM	945kHz

4. Test Mode

4-1 Setting method of the Test Mode

TEST MODE	KEY	SETTING
CD MODE	CD PLAY	Insert the AC cord to AC wall outlet with pressing the left key.
MD MODE	MD PLAY	
MD MECHA. ADJ. MODE	EJECT	
* SUB CLOCK OSC DIAGNOSIS	MENU	

- The oscillation diagnosis(existence of oscillation and measurement of period) of a sub clock is performed before the test mode is entered. If the diagnosis result is OK, the system enters the test mode.

If the diagnosis result is NG, the oscillation of the sub clock is diagnosed again. If the result is OK, the system enters the test mode. If the diagnosis result is continuously NG 5 times, the system stops with "ERR1" and "ERR2" displayed.

4-2 Cancel of the test mode

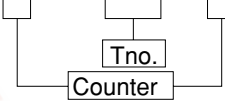
- By turning the AC off, the system is initialized and the test mode is canceled.
- Cancel the test mode only if the power switch is turned off

4-3 Contents of the Test Mode

- The muting during mode selection is not controlled in the test mode.
- During the test mode, it can be operated in a special manner that is different from an ordinary operation by using the keys on the main body, specifically as shown in the following tables.

CIRCUIT DESCRIPTION

4-5 MD Test Mode

KEYS	DISPLAY	OPERATION
STOP	Tno. 00 : 00	• Stop the MD operation.
SKIP UP/SKIP DOWN	Usual Indication	• MD Track No up or down.
* SKIP UP	FF	• MD FF search.
* SKIP DOWN	FB	• MD FB search.
BEST HITS	C * * J M * * * J * *  M :MD C :CD	• Hi-speed O.T.E.(CD→MD) operation with LP4 mode.
MD REC	AUX J REC	• Start the MD recording.
SET	ALL ERASE ↓ COMPLETE ↓ BLANK DISC	• Stop the MD operation ,and start operation of ALL-ERASE if disc is recordable.

* Keep to press the key more than 400ms.

5. MD TEST MODE FOR ADJUSTMENT

5-1 Entering the Test Mode

While pressing the EJECT key, turn the AC on.

5-2 Cancelling the Test Mode

Turn the AC off.

5-3 Key Operations for Adjustment

KEYS	OPERATION
SKIP UP/DOWN	Select mode or adjustment value change.
MD PLAY/PAUSE	Fix mode or adjustment value.
STOP	Cancel the selected mode.
* ►►	Pickup moves outwards when pressed skip up key.
* ◄◄	Pickup moves inwards when pressed skip down key.

* Remote control only.

5-4 Selection of Adjustment Test Mode

Whenever the "SKIP UP" and "SKIP DOWN" keys are pressed, the adjustment test mode is selected.

No.	LCD	DESCRIPTION	SECTION
1	TEMP ADJU	The work of adjustment is unnecessary in this mode.	6-5
2	LDPWR ADJU	Laser power adjustment.	6-6
3	LDPWR CHEC	Laser power check.	6-6
4	EFBAL ADJU	Traverse adjustment.	6-7
5	TE B. ADJ	Automatic EF balance adjustment.	6-8
6	FBIAS ADJU	Focus bias adjustment.	6-9
7	CPLAY MODE	Continuous playback mode.	5-5
8	CREC MODE	Continuous recording mode.	5-6
*9	STT-LIMIT	Check the mechanism start limit switch position.	-
*10	JUMP MODE	Track jump checking mode.	-
*11	SRV DAT RE	Servo data reading.	-
*12	E2P MODE	E2PPROM data reading or rewrite.	-
*13	E2P INITIAL	E2PPROM data initializing.	-

For more information on each adjustment mode, refer to each section of 6, "Electrical adjustment".

If other adjustment mode has been entered incorrectly, press the STOP key to exit the mode.

* The number 9 - 13 are not used for service. If these mode have been entered incorrectly, press the STOP key immediately to exit the mode. Specially, do not use E2P INITIAL. (E2PPROM data has initialized if used it.)

5-5 Continuous Playback Mode

1. Setting of Continuous Playback Mode		
No.	Key	Display/Function
1	◄◄ ►►	Select [CPLAY MODE]
2		Load disc
3	MD ►/■	[CPLAY MID] [c=xxxx a=yy] error (xxxx=C1 error, yy=ADIP error)
4	STOP	[CPLAY MODE]
2. Change of Playback Points(in continuous playback mode)		
No.	Key	Display/Function
1		Carry out No.1 to 3 in the above table.
2	MD ►/■	[CPLAY OUT] [c=xxxx a=yy] error (xxxx=C1 error, yy=ADIP error)
3	MD ►/■	[CPLAY IN] [c=xxxx a=yy] error (xxxx=C1 error, yy=ADIP error)
4	STOP	[CPLAY MODE]
5	EJECT	Disc out

5-6 Continuous Recording Mode

1. Continuous Recording Setting		
No.	Key	Display/Function
1	◄◄ ►►	Select [CREC MODE]
2		Load the recordable disc
3	MD ►/■	[CREC MID]
4	MD ►/■	[CREC (zzzz)] CREC address (0300h cluster=recording start point)
5	STOP	[CREC MODE]
2. Change and End of Recording Points		
1		Carry out No.1 to 3 in the above table Select[CREC MID]
2	►►	[CREC OUT]
3	MD ►/■	[CREC (zzzz)] CREC address (0700h cluster=recording start point)
4	STOP	[CREC MODE]
5	MD ►/■	[CREC MID]
6	►► (2time)	Select [CREC IN]
7	MD ►/■	[CREC (zzzz)] CREC address (0300h cluster=recording start point)
8	STOP	[CREC MODE]
9	EJECT	Disc out

CIRCUIT DESCRIPTION

1. The recording start addresses of IN, MID, and OUT are described below.
IN 30H cluster
MID 300H cluster
OUT 700H cluster
2. An erasure prevention control is not detected in the test mode. Be careful not to enter the continuous recording mode using a disc containing the data that should not be erased.
3. Do not record continuously for more than five minutes.
4. Take care that no vibration is applied during continuous recording.

6. ELECTRICAL ADJUSTMENT

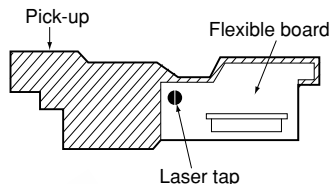
6-1 Precaution during confirmation of Laser Diode emission

During adjustment, do not view the emission of a laser diode from just above for confirmation. This may damage your eyes.

6-2 Precaution on handling of Optical pick-up (KMS-260B)

The laser diode in an optical pick-up is easy to be subject to electrostatic destruction. Therefore, solder-bridge the laser tap on the flexible board when handling the optical pick-up.

When removing the flexible board from the connector, make a solder bridge in advance, then remove the board. Be careful not to remove the solder bridge before inserting the connector. Moreover, take careful measures against electrostatic destruction. The flexible board is cut easily. Handle the flexible board with care.



6-3 Precaution during adjustment

- 1) Perform the adjustment and confirmation marked with “O” in the order shown in the table when the parts below are replaced.

	Optical pick-up	BD board		
		IC7	D3	IC1, IC2, IC6
1.Temperature compensation offset adjustment	X	O	O	O
2.Laser power adjustment	O	O	X	O
3.Traverse adjustment	O	O	X	O
4.Focus bias adjustment	O	O	X	O
5.Focus rate confirmation	O	O	X	O

- 2) In the test mode, perform the adjustment. After adjustment is completed, cancel the test mode.
- 3) Perform the adjustment in the order described.
- 4) Use the following tools and measurement equipment.
 - CD test disc TGYS-1
 - Laser power meter
 - Oscilloscope (with bandwidth of more than 40 MΩ)
(Calibrate the probe before measurement.)
 - Digital voltmeter
 - Thermometer

- 5) Take care that VC and GND (ground) are not connected on the oscilloscope when two or more signals are monitored on the oscilloscope. (VC and GND are short-circuited in this case.)

6-4 Creating the recordable continuous recording disc

This disc is used for focus bias adjustment and error rate confirmation. How to create the recordable continuous recording disc is 4-6.

6-5 Offset Adjustment

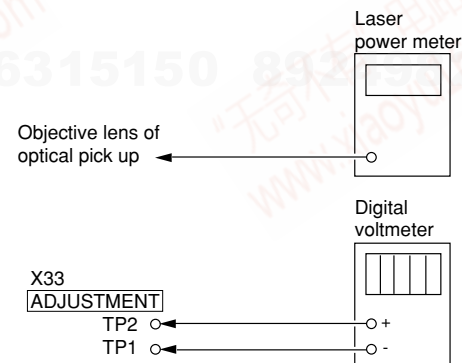
No.	Key	Display/Function
1	◀▶	Select [TEMP ADJU]
2	MD ▶/II	[TEMP=xx (yy)] (xx=compensation data, yy=setting temperature)
3	◀▶	Input "yy" with present temp..
4	MD ▶/II	[TEMP=**SAVE] in writing data [TEMP ADJU ST]

6-6 Laser Power Check and Adjustment

Laser power setting in playback and recording modes.

Preparation

1. Remove the MD mechanism from the unit.
2. Connect the digital voltmeter to TP1 and TP2 on X33 pcb.
3. Remove the top plate from traverse unit.
4. Remove the magnetic head.
5. Remount the MD mechanism to the unit



1. Laser Power Adjustment

No.	Key	Display/Function
1	◀◀▶▶▶	[LDPWR ADJU]
2		Load recordable disc
3	MD ▶/	Load the disc and laser on [(a0.9mW) \$xx] read power (xx=power value)
4	EJECT	Unload the disc and laser on
5	MD ▶/	[LDPWR CHECK]
6	◀◀▶▶	Move the pickup to check the laser power with laser power meter sensor
7	◀◀▶▶▶	Adjust "xx" so that the power meter shows 0.9mW.
8	MD ▶/	[(a7.0mW) \$xx] writing power
9	◀◀▶▶▶	Adjust "xx" so that the power meter shows 7.0mW. This adjustment should be carried out in 15 secs.
10	MD ▶/	Laser power off Display shows [LDPWR ADJUST] after [LDPWR<\$xx] to save the data in E2PROM

Start from No.2 if readjust.

CIRCUIT DESCRIPTION

2. Laser Power Check

No.	Key	Display/Function
1	◀▶▶▶	[LDPWR CHEC]
2	MD ▶/	[(c0.9mW) \$xx] (xx=0.85 to 0.95mW)
3	MD ▶/	[(c7.0mW) \$xx] Laser power meter: 7.0±1.0mW* VOM:optical pickup indication value ±10%*
4	MD ▶/	[LDPWR CHEC]

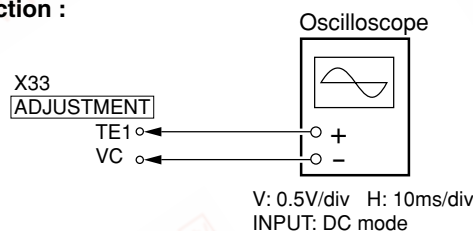
(optical pick-up label)

KMS 260B
27x40
B0825

* In this case, $I_{op} = 82.5 \text{ mA}$
 $I_{op}(\text{mA}) = \text{Reading of digital voltmeter}(\text{mV})/1(\Omega)$

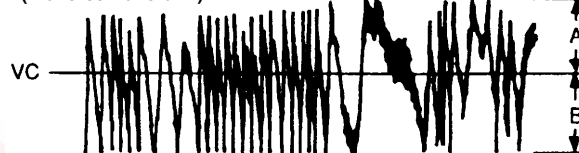
6-7 EF Balance(Traverse Adjustment)

Connection :



During this adjustment, the oscilloscope changes in units of about 2%. Adjust so that the waveform comes nearest to the specified value. (MO groove read power traverse adjustment)

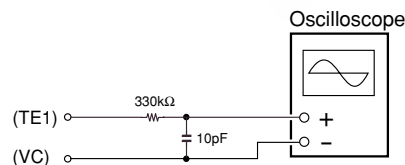
(Traverse waveform)



Specification : A = B

Notes :

1. Data is erased during MO write when a recorded disc is used for this adjustment.
2. If the traverse waveform is difficult to be monitored, connect an oscilloscope as shown in the figure below.



6-8 Automatic EF Balance Adjustment

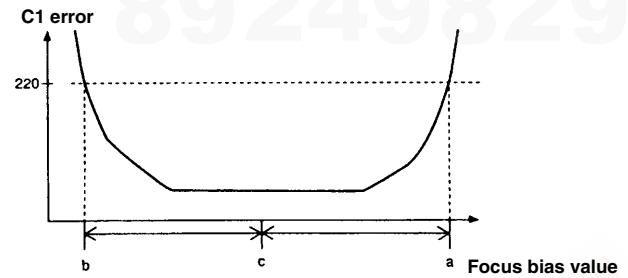
• Automatic EF balance adjustment is performed.

1. Recordable Disc		
No.	Key	Display/Function
1		Connect the oscilloscope to TE1 and VC in X33 pcb
2	◀▶▶▶	Select [EFBAL ADJU]
3		Load the recordable disc
4	MD ▶/	[EFBAL MO-W]
5	MD ▶/	[EF=\$**MOW]
6	◀▶▶▶	Write power adjustment. Adjust the waveform as follows.
7	MD ▶/	Display shows [EF=\$**MOR] after [EFB=\$**xSAVE] to save the data in E2PROM. Mode changes write to read Focus and disc servo are on. Tracking servo off.
8	◀▶▶▶	Read power adjustment. Adjust the waveform as follows.
9	MD ▶/	Save the data in E2PROM. Display shows [EFBAL MO-P]
	MD ▶/	Display shows [EF=\$**MOP] (Pickup travels to search pits and tune the servo to on.)
10	◀▶▶▶	Adjust the waveform as follows.
11	MD ▶/	Display shows [EFB=\$**xSAVE] to save the data in E2PROM. Display shows [EFBAL CHAN]
12	EJECT	Unload disc.
2. Pre Master Test Disc(TGYS-1)		
No.	Key	Display/Function
1		Load the disc(TGYS-1). [EFBAL CD]
2	MD ▶/	[EF=\$**CD] servo is on
3	◀▶▶▶	Adjust the waveform as follows.
4	MD ▶/	Save the data in E2PROM. Display shows [EFB=\$**xSAVE] in brief time. [EF PHASE]
5	EJECT	Unload disc.

No.	Key	Display/Function
①	◀▶▶▶	[TE B. ADJ]
②		Load a recordable disc.
③	MD ▶/	[TE B. MO-W] (Automatic Adjustment Mode Indication) = Low Reflection • Groove • Writing Power Automatic Adjustment
④		Display shows [EFB = XXX SAVE] in brief time and save the data in E2PROM. Next step
⑤		[TE B. MO-R] (Automatic Adjustment Mode Indication) = Low Reflection • Groove • Reading Power Automatic Adjustment
⑥		Display shows [EFB = XXX SAVE] in brief time and save the data in E2PROM. Next step
⑦		[TE B. MO-P] (Automatic Adjustment Mode Indication) = Low Reflection • PIT • Reading Power Automatic Adjustment
⑧		Display shows [EFB = XXX SAVE] in brief time and save the data in E2PROM. Next step
⑨		[EFBAL CHANGE] (Unload a disc)
⑩		Load a pre-master test disc(TGYS-1).

CIRCUIT DESCRIPTION

No.	Key	Display/Function
⑪	MD ►/II	[TE B. CD] (Automatic Adjustment Mode Indication) = High Reflection • PIT • Reading Power
⑫	MD ►/II	Display shows [EFB = XXX SAVE] in brief time and save the data in E2PROM. [TE B. ADJ] menu



6-9 Focus Bias Adjustment

Use the special disc(continuous recorded disc)

No.	Key	Display/Function
1	◀▶▶▶▶▶	Select [FBIAS ADJU]
2		Load the disc.
3	MD ►/II	[a=xx yyyy/] point a (xx=focus bias, yyyy=C1 error)
4	◀▶▶▶▶▶	Adjust "yyyy" to 220±
5	MD ►/II	[b=xx yyyy/] point b
6	◀▶▶▶▶▶	Adjust "yyyy" to 220±
7	MD ►/II	[C=xx yyyy/] point c Check "yyyy" within 50
8	MD ►/II	Display shows [aa bb cc(xx)] focus bias adjust (aa= point a,bb=b,cc=c)

* Notes :

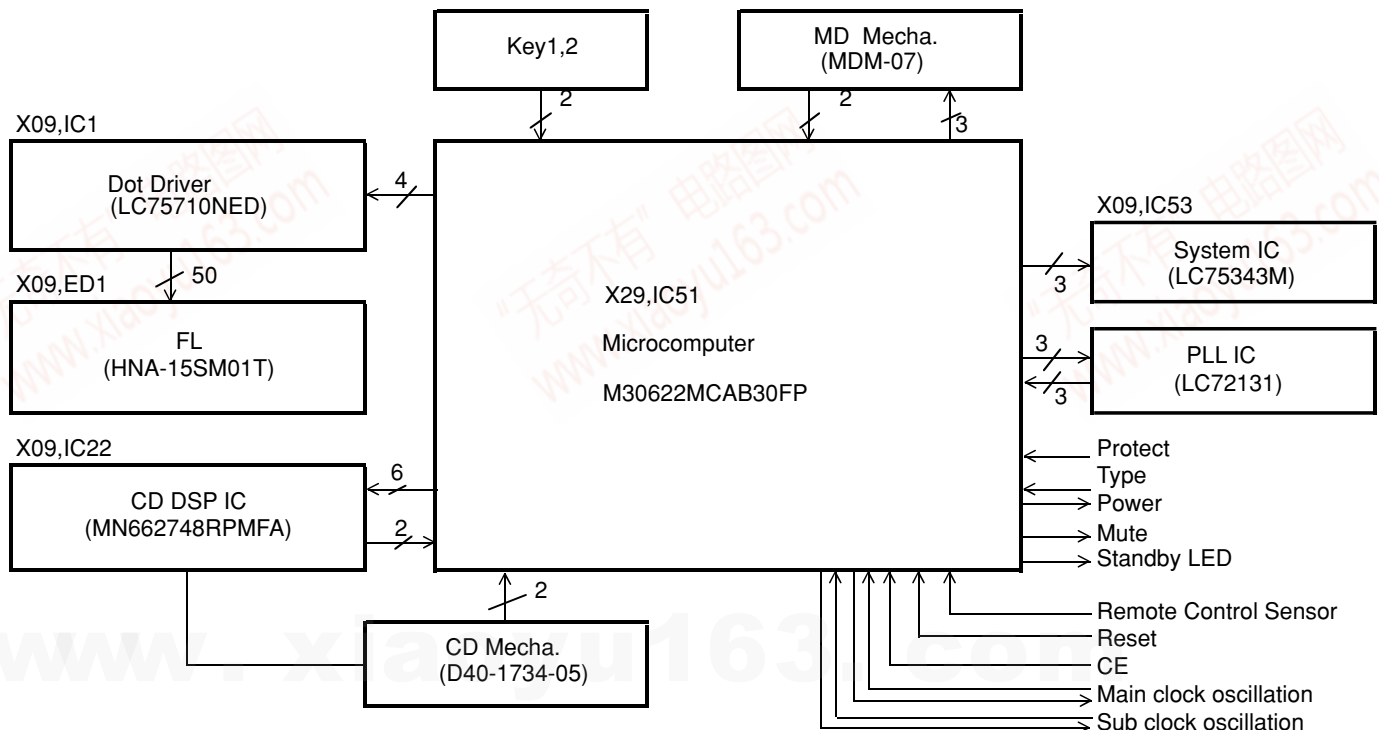
- The relation between the C1 error and focus bias value is shown in the figure below. Points "a" and "b" in the figure are detected by the above adjustment. Focal position "C" is automatically obtained from points "a" and "b" by calculation.
- The C1 error rate fluctuates. Therefore, perform the adjustment according to the observed mean value.

6-10 Error Rate Check

No.	Key	Display/Function
1. CD Error Rate		
1	◀▶▶▶▶▶	[CPLAY MODE]
2		Load the test disc(TGYS-1)
3	MD ►/II	Display shows [CPLAY MID] Access end [c=xxxx a=yy] xxxx=C1 error (lower 20) yy=AIDP error
4	STOP	[CPLAY MODE]
5	EJECT	Unload disc.
2. MO Error Rate		
1	◀▶▶▶▶▶	[CPLAY MODE]
2		Load the recordable disc
3	MD ►/II	Display shows [CPLAY MID] Access end [c=xxxx a=yy] xxxx=C1 error (lower 50) yy=AIDP error(00)
4	STOP	[CPLAY MODE]
5	EJECT	Unload disc.

7. Microcomputer

7-1 Microcomputer Periphery Block Diagram



CIRCUIT DESCRIPTION

7-2 Key Matrix

Input Voltage (V)	KEY 1 Pin94	KEY 2 Pin93
0.00 ~0.45	AUX	POWER
0.48 ~1.10	REC	MD EJECT
1.13 ~1.78	BEST HITS	SKIP DOWN
1.81 ~2.37	SOUND	STOP
2.41 ~2.80	SET	SKIP UP
2.84 ~3.25	MENU	MD PLAY/PAUSE
3.29 ~3.68	VOL DOWN	CD PLAY/PAUSE
3.72 ~4.22	VOL UP	BAND
⋮	—	—
4.24 ~4.60	KEY OFF	KEY OFF

*The input voltage value : for 4.6[V] in a standard voltage.

7-3 Port Description of Microcomputer

Port No.	Port Name	I/O	Description	Active	
				H	L
1	SEL DATA	O	Data output to electric volume system IC.		
2	SEL CLK	O	Clock output to electric volume system IC.		
3	SLTSW	I	CD start limit switch input.		
4	XRST	O	Reset signal output to CD DSP.		Reset
5	NC	-	Unused.		
6	SUBQ	I	CD sub code input.		
7	SQCK	O	Clock output for CD sub code.		
8	BYTE	-	Connected to ground.		
9	CN VSS	-	Connected to ground.		
10	XC IN	I	Timer clock input (32.768kHz).		
11	XC OUT	O	Timer clock output (32.768kHz).		
12	RESET	I	Reset signal input for microcomputer.		Reset
13	X OUT	O	Main clock output (10MHz)		
14	VSS	-	Connected to ground.		
15	X IN	I	Main clock input. (10MHz)		
16	VCC(BU)	-	Supply power input (+5V).		
17	NMI	-	Supply power input (+5V).		
18	REM	I	Remote control signal input.		
19	NC	-	Unused.		
20	BLKCK	I	Sub code synchronous signal input.		
21	CE	I	Chip enable input for back up detection.	AC On	AC Off
22	NC	-	Unused.		
23	MLD	O	CD DSP command load signal output.		
24	OP/CL SW	I	Input port of detection switch for CD open/close.		
25	MD CE	I	Detection port for MD back up.		
26	MD RST	I	Reset output from MD mechanism.		
27	MD IN SW	I	Load switch input for MD disc.		
28	MCLK	O	CD DSP command clock signal output.		
29	STAT	I	CD DSP status signal input.		
30	MDATA	O	CD DSP command data output.		
31	MD TXD	O	MD communication TX (to mecha. u-com RX)		
32	MD RXD	I	MD communication RX (to mecha. u-com TX)		
33	AMP	O	Control port of standby switch for power amplifier.		
34	AMUTE	O	Audio mute output.		
35	FL DATA	O	Data output to FL dot driver.		
36	NC	-	Unused.		
37	FL CLK	O	Clock output to FL dot driver.		

CIRCUIT DESCRIPTION

Port No.	Port Name	I/O	Description	Active	
				H	L
38	EEP SDA	-	Unused.		
39	EEP SCL	-	Unused.		
40	NC	-	Unused.		
41	NC(EPM)	-	Unused.		
42~45	NC	-	Unused.		
46	(CE)	-	Unused.		
47	LED STBY	O	Standby led (red) control port.	ON	OFF
48	LED TIMER	O	Timer led (green) control port.	ON	OFF
49	FL RESET	O	Reset output to FL dot driver.		Reset
50	FL CE	O	CE output to FL dot driver.		
51	CD ON/OFF	O	CD DSP power on/off control.	ON	OFF
52~61	NC	-	Unused.		
62	VCC(BU)	-	Supply power input (+5V).		
63	NC	-	Unused.		
64	VSS	-	Connected to ground.		
65	NC	-	Unused.		
66	POWER	O	Power relay control.		
67~80	NC	-	Unused.		
81	ST	I	Stereo detector input.		
82	SD	I	SD detector input.		
83	PLL CLK	O	PLL IC clock output.		
84	PLL DATA	O	PLL IC data output.		
85	PLL CE	O	PLL IC chip enable output.		
86	PLL DO	I	PLL IC data input.		
87~90	NC	-	Unused.		
91	CD PROTECT	I	Detection port for CD protection. Protection ON : Less than 4.0V		
92	PROTECT	I	Detection port for power supply protection. Protection ON : Less than 0.5V		
93,94	KEY2,KEY1	I	A/D key (1,2) input.		
95	TYPE	I	Discrimination of tuner destination.		
96	AVSS	-	Connected to ground.		
97	NC	-	Unused.		
98	VREF	-	A/D reference voltage input for the A/D converter.		
99	AVCC	-	A/D converter positive voltage.		
100	SEL CE	O	Chip enable output to electric volume system IC.		

CIRCUIT DESCRIPTION

8. Port Description of CD RF IC : AN8806SBM (X09,IC21)

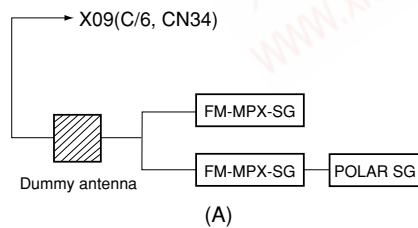
Port No.	Port Name	I/O	Description
1	PD	I	APC Amp input
2	LD	O	APC Amp output
3	LD ON	-	APC ON/OFF control
4	LDP	-	APC reference voltage adjusting
5	VCC	-	Power supply
6	RF	I	RF Amp reverse input
7	RF OUT	O	RF Amp output
8	RF IN	I	AGC input
9	CAGC	-	AGC loop filter connection
10	ARF	O	AGC output
11	CENV	-	Capacitance connection for RF detection
12	CEA	-	Capacitance connection for RF HPF-Amp
13	CSBDO	-	Capacitance connection for RF dark side envelope detection
14	BDO	O	BDO output
15	CSBRT	-	Capacitance connection for RF bright side envelope detection
16	OFTR	O	OFTR output
17	RFDET	O	RFDET output
18	GND	-	GND
19	ENV	O	3TENV output
20	VREF	O	VREF output
21	LD OFF	O	APC OFF control
22	V DET	O	VDET output
23	TEBPF	I	VDET input
24	CROSS	O	CROSS output
25	TEOUT	O	TE. Amp output
26	TE-	I	TE. Amp reverse input
27	FEOUT	O	FE. Amp output
28	FE-	I	FE. Amp reverse input
29	FBAL	O	F. BAL control
30	TBAL	O	T. BAL control
31	PDFR	-	I-V Amp conversion resistance adjustment
32	PDER	-	I-V Amp conversion resistance adjustment
33	PDE	I	I-V Amp input
34	PDF	I	I-V Amp input
35	PDBD	I	I-V Amp input
36	PDAC	I	I-V Amp input

ADJUSTMENT

Tuner adjustment

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	RECEIVER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION :		SELECTOR : FM					
1	TUNING LEVEL	(A) 98.0MHz MONO 1kHz, ± 75 kHz dev. 35.2dBf (ANT. input)	—	MONO 98.0MHz	X09 C/6 VR31	Adjust VR1 and stop at the point where ED1(TUNED) goes on.	

SYSTEM CONNECTIONS



CD player check

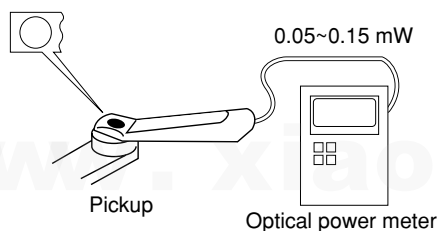
No.	ITEM	INPUT SETTING	OUTPUT SETTING	PLAYER SETTING	ALIGNMENT POINT	ALIGN FOR	FIG.
For this adjustment, enter the test mode. TEST MODE : While pressing the [CD PLAY/PAUSE] key, turn power on.							
1	LASER POWER	—	Set the sensor section of the optical power meter on the pickup lens.	Short circuit *OPEN/CLOSE SW. Press the "PLAY" key to check that the display is "03". *CN26(①,②), X09	—	On the power from 0.05 to 0.15mW. when the diffraction grating is correctly aligned with the RF level of 0.8Vp-p or more	(a)
2	LASER CURRENT	Test disc Type 4	Connect the DC voltmeter to CN25(#1 and #2) in X09(B/6)	Press the "PLAY" key to check that the display is "03" or "05"	—	220mV to 550mV	

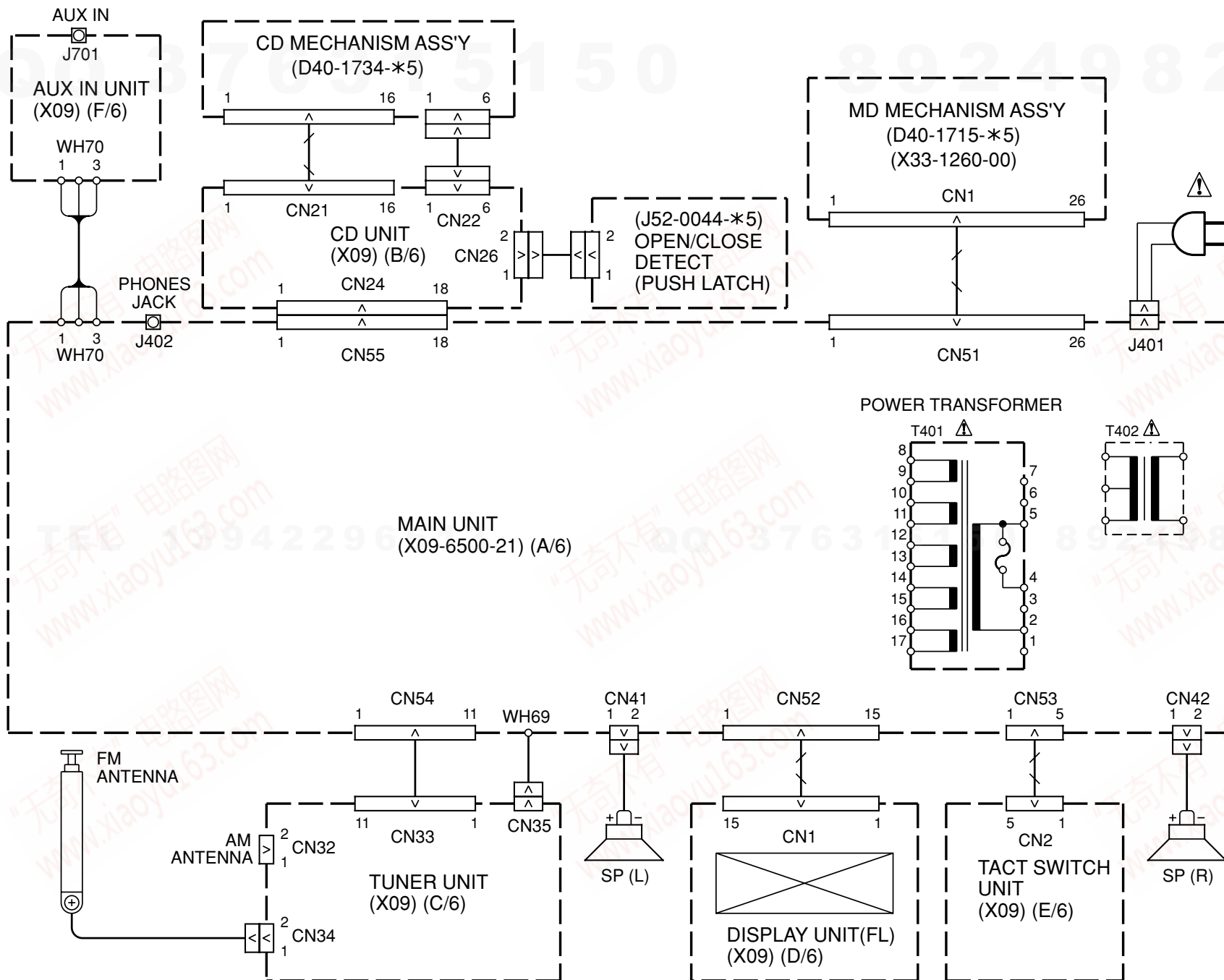
Note:

Type 4disc :SONY YEDS-18 Test Disc or equivalent. (KTD-02)

LPF : Around 47k Ω + 390pF or so.

(a) Laser Power

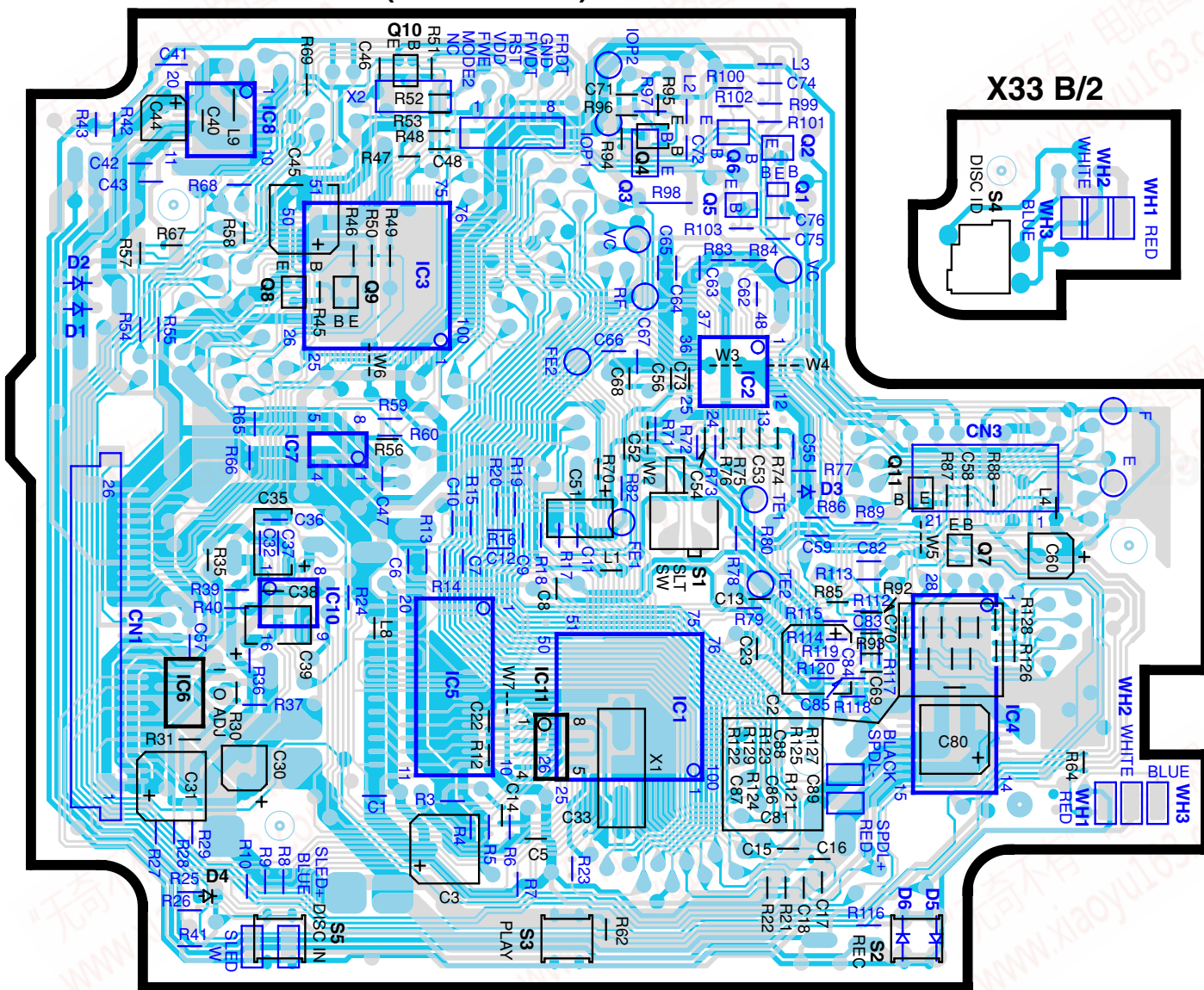




PC BOARD (Component side view)

X33-1260-00 A/2 (J70-1452-02)

X33 B/2

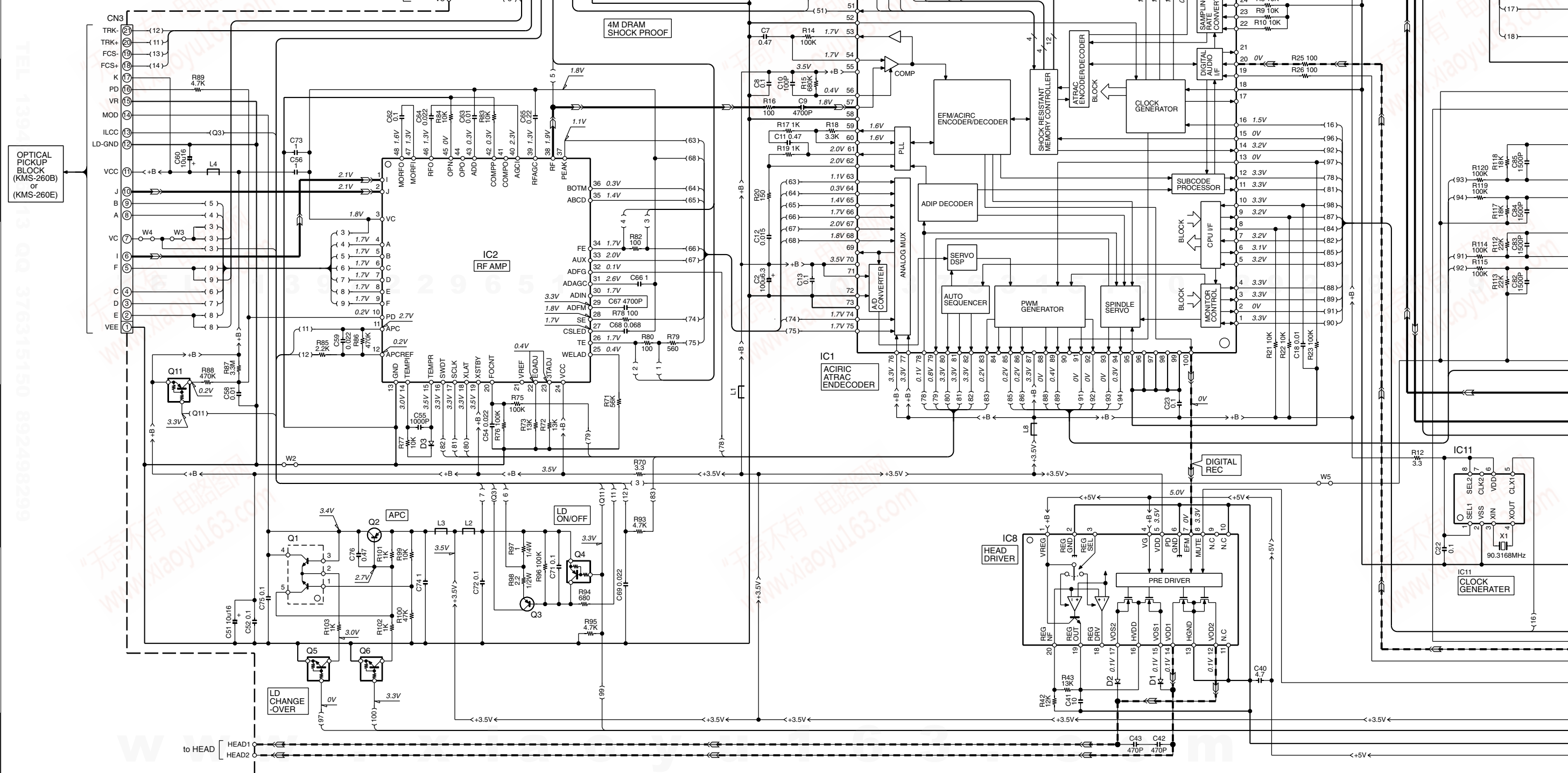


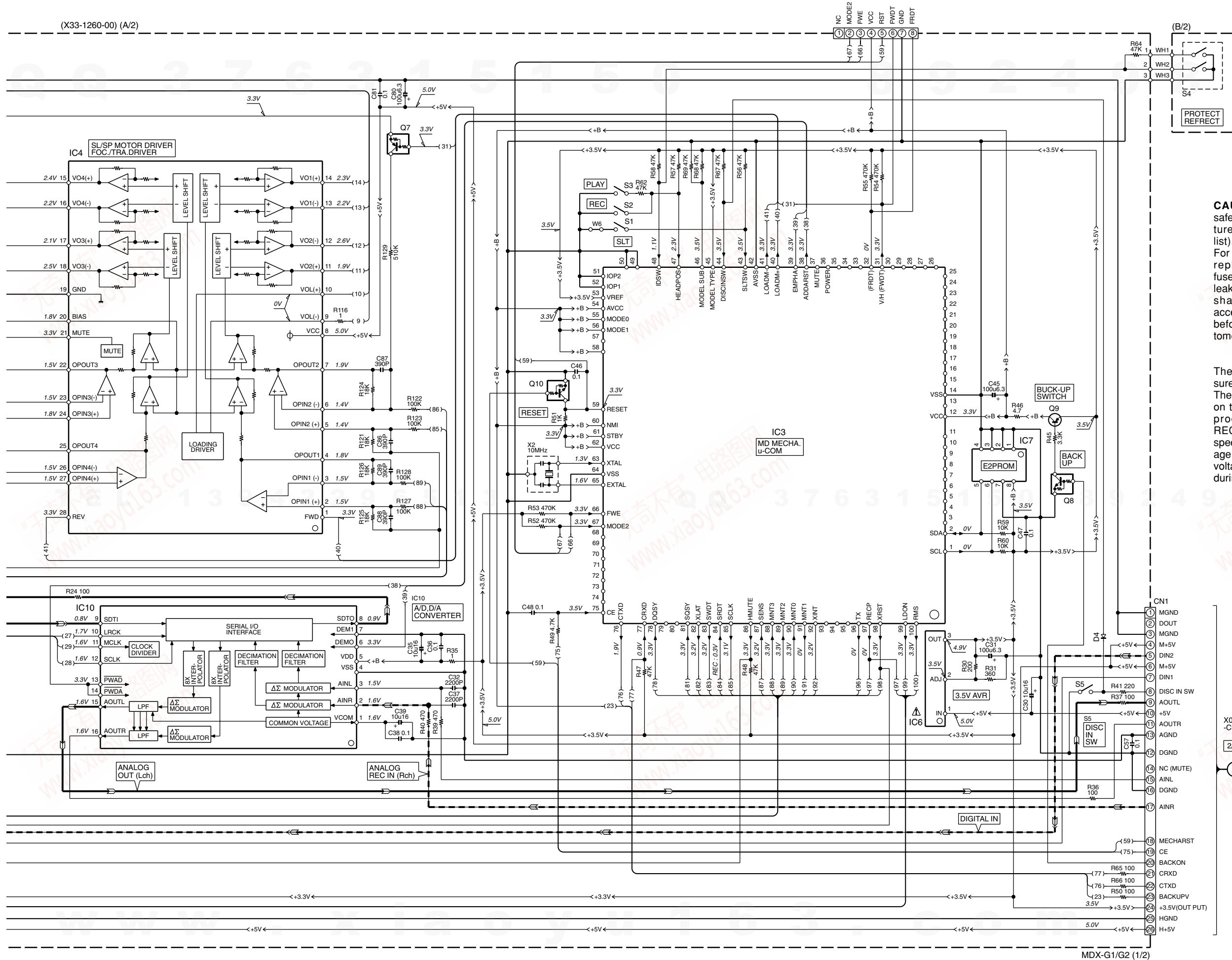
15

- IC1 : CXD2662R Q1 : UMW1N
IC2 : CXA2523AR * or Q2,9 : 2SA1576A(R,S)
IC3 : HD6432227N22FA Q3 : 2SB798-DL
IC4 : BA5984FP Q4,11 : DTA144EUA
IC5 : LC32S4400T-10 Q5,6 : DTC114YUA
IC6 : RC1117ST Q7 : DTA124EUA
IC7 : S-24C02BFJ-TB or Q8,10 : DTC124EUA
BR24C02F
IC8 : BD7910FV D1,2 : FS1J6TP
IC10 : AK4550VT D3,4 : MA111
IC11 : C6006AZ D5,6 : S1B

- PLAYBACK
PLAYBACK (DIGITAL)
RECORDING
RECORDING (DIGITAL)
GND LINE
+B LINE
-B LINE

(X33-1260-00) (A/2)

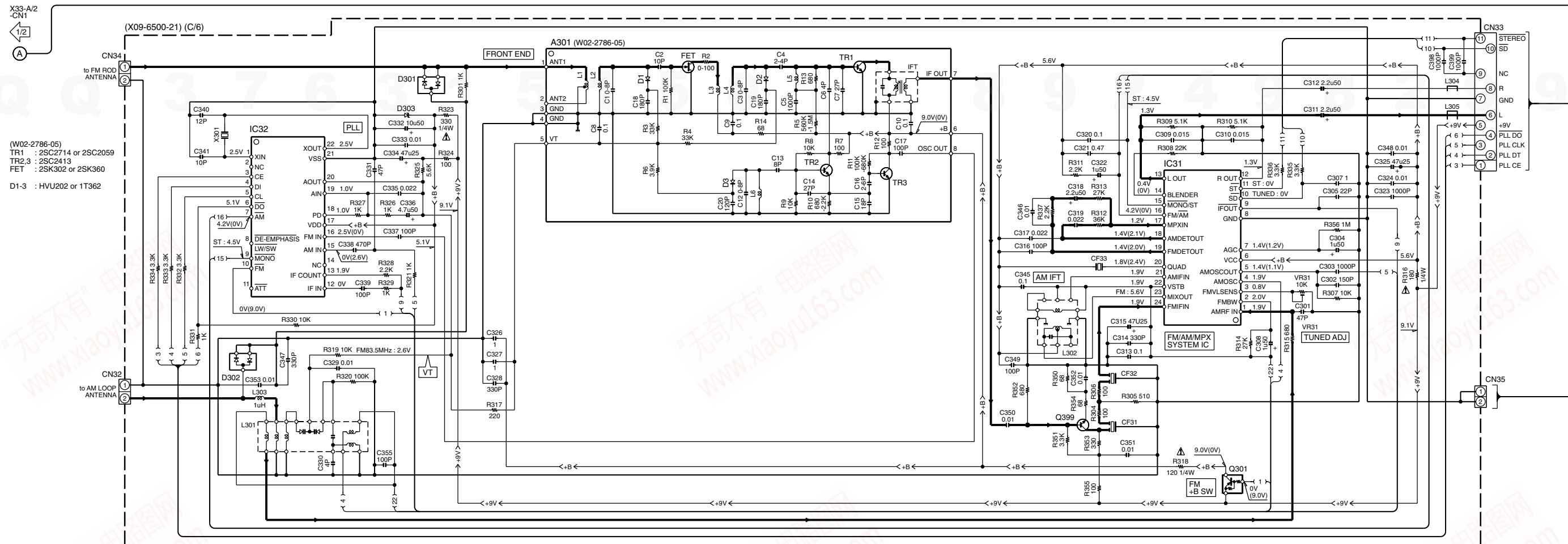




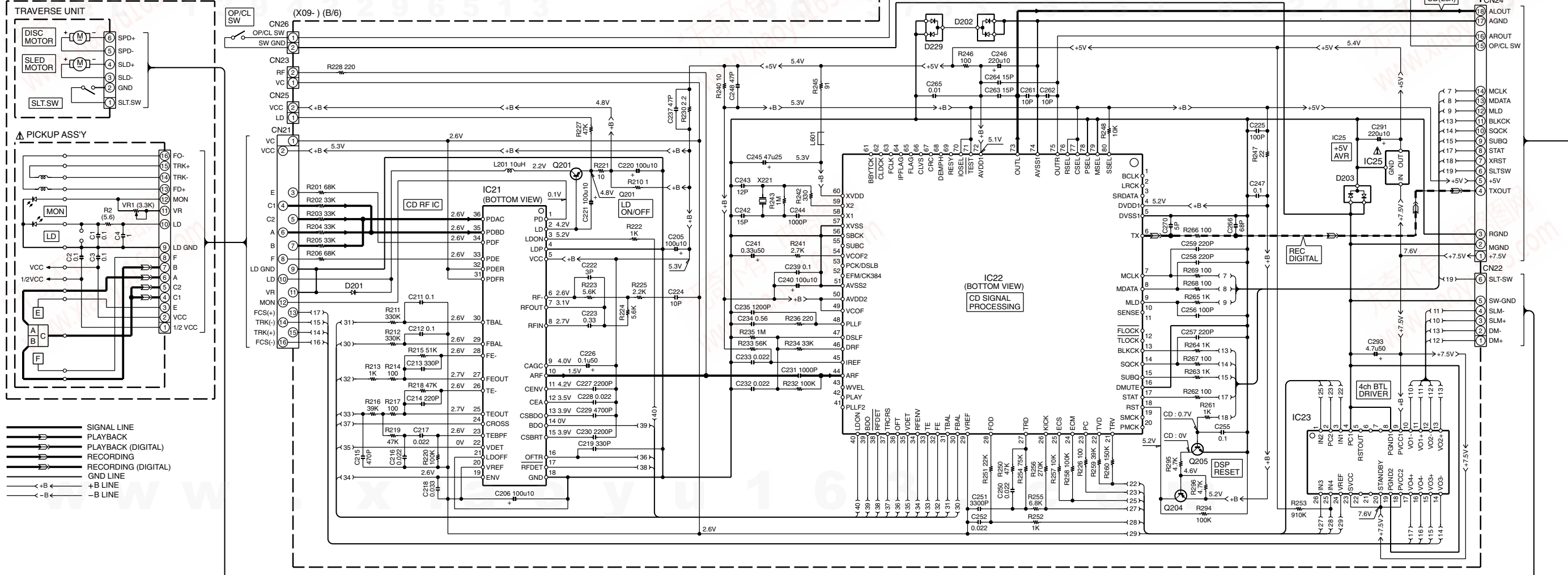
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

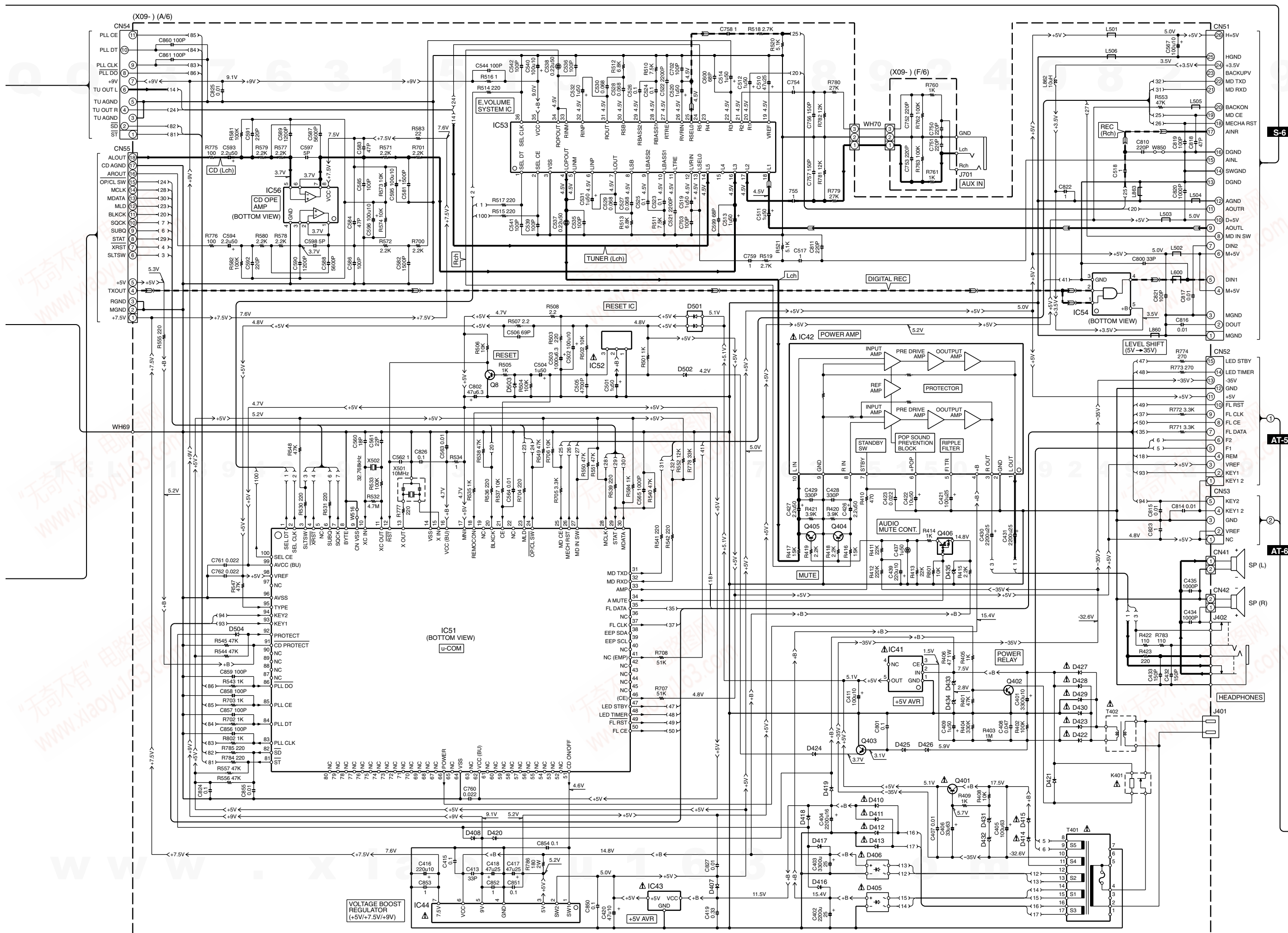
The DC voltage is an actual reading measured with a high impedance type voltmeter. The measurement value may vary depending on the measuring instruments used or on the product. Refer to the voltage during RECORDABLE MD PLAY unless otherwise specified; The value shown in () is the voltage measured at the moment of STOP. The voltage followed by (REC) refers to the value during MD RECORDING.

X09-A/6
-CN51
2/2
A → AN-1

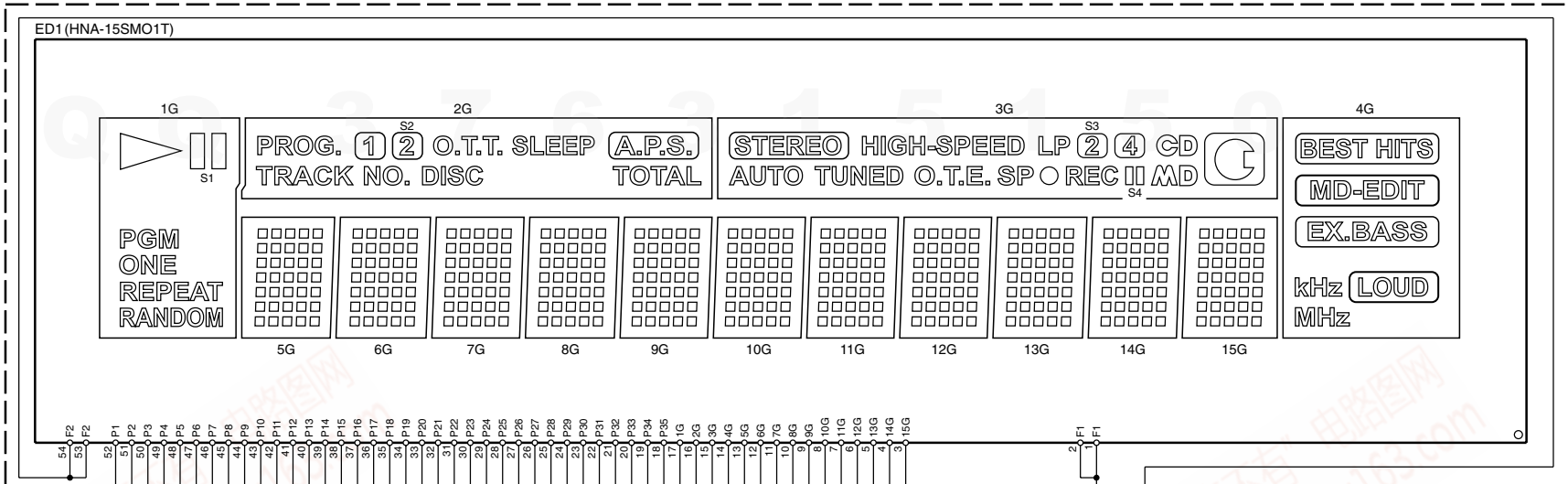


CD MECHANISM ASSY
 (D40-1734-05)





(X09-) (D/6)



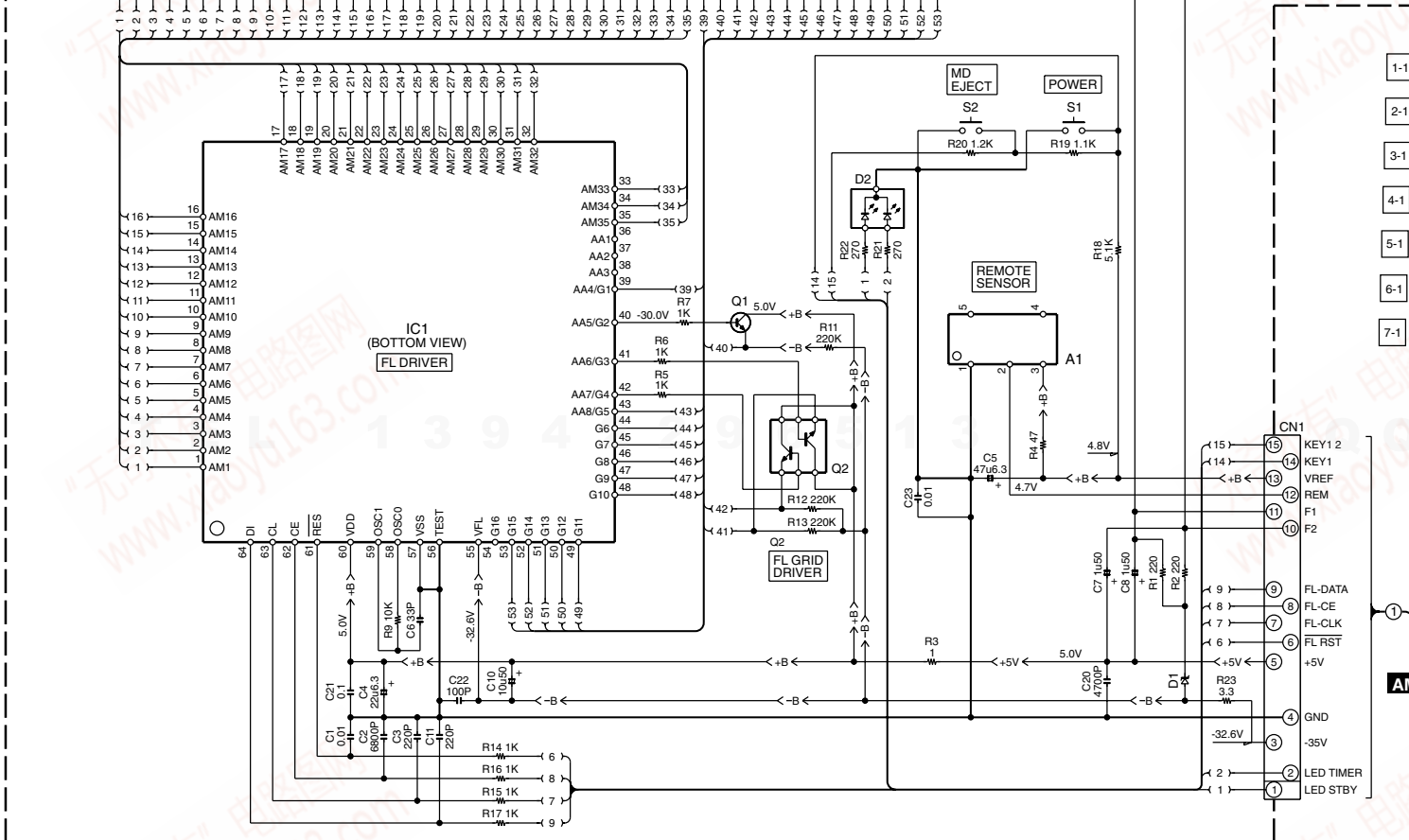
1-1	1-2	1-3	1-4	1-5
2-1	2-2	2-3	2-4	2-5
3-1	3-2	3-3	3-4	3-5
4-1	4-2	4-3	4-4	4-5
5-1	5-2	5-3	5-4	5-5
6-1	6-2	6-3	6-4	6-5
7-1	7-2	7-3	7-4	7-5

(5G-15G)

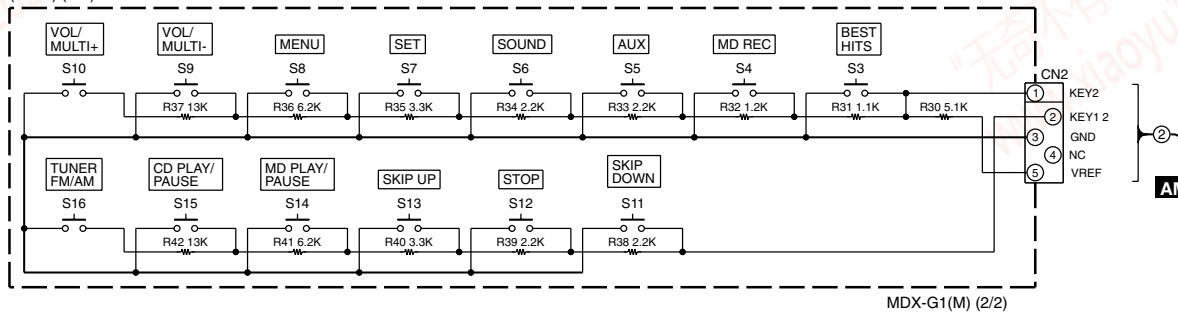
- IC1 : LC75710NED
IC21 : AN8806SBM
IC22 : MN662748RPMFA
IC23 : AN4801SB-E1
IC25 : BA05FP
IC31 : TA2099N
IC32 : LC72131
IC41 : XC62HR5102P
IC42 : LA4262
IC43 : TA7805S
IC44 : AN80T03
IC51 : M30622MCAB30FP
IC52 : S-80840ANY
IC53 : LC75343M
IC54 : HD74LV1G08A
IC56 : NJM4565MD
- Q1 : 2SC4081 (F,S)
Q2 : HN1C01F
Q8,402 : KTC3199 (Y,GR) or 2SC2785 (F,E)
Q201,204 : 2SA1577 (Q,R)
Q205,399 : 2SC4081 (R,S)
Q301 : DTA114EUA or UN5111
Q401 : 2SC3940A (R,S) or 2SD1768S
Q403 : KTA1267 (Y,GR) or 2SA1175 (F,E)
Q404,405 : 2SC2878 (B)
Q406 : DTA124ESA
- D1 : MTZJ6.2 (B) or
RD6.2ES (B) or HZS6.2N (B2)
D2 : B30-2601-05
D201407,408,416-418,
420-426,502-504 : HSS104A or 1SS133
D202,203,229,301,302 : 1SS302 or DA204U or MA143A
D303 : MTZJ5.1 (B) or
RD5.1ES (B) or HZS5.1N (B2)
D405,406 : D2SBA20F03
D410-415,427-430 : 1T2 or
S5688B
D419 : 1T2
D431,432 : MTZJ20 (B) or
RD20ES (B) or HZS20N (B2)
D433 : MTZJ4.7 (B) or
RD4.7ES (B) or HZS4.7N (B2)
D434 : MTZJ2.7 (B) or
RD2.7ES (B) or HZS2.7N (B2)
D435 : MTZJ3.9 (B) or
RD3.9ES (B) or HZS3.9N (B2)
D501 : 1SS402

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

The DC voltage is an actual reading measured with a high impedance type voltmeter. The measurement value may vary depending on the measuring instruments used or on the product. Refer to the voltage during RECORD-ABLE MD PLAY unless otherwise specified; The value shown in () is the voltage measured at the moment of STOP. The voltage followed by (REC) refers to the value during MD RECORDING.

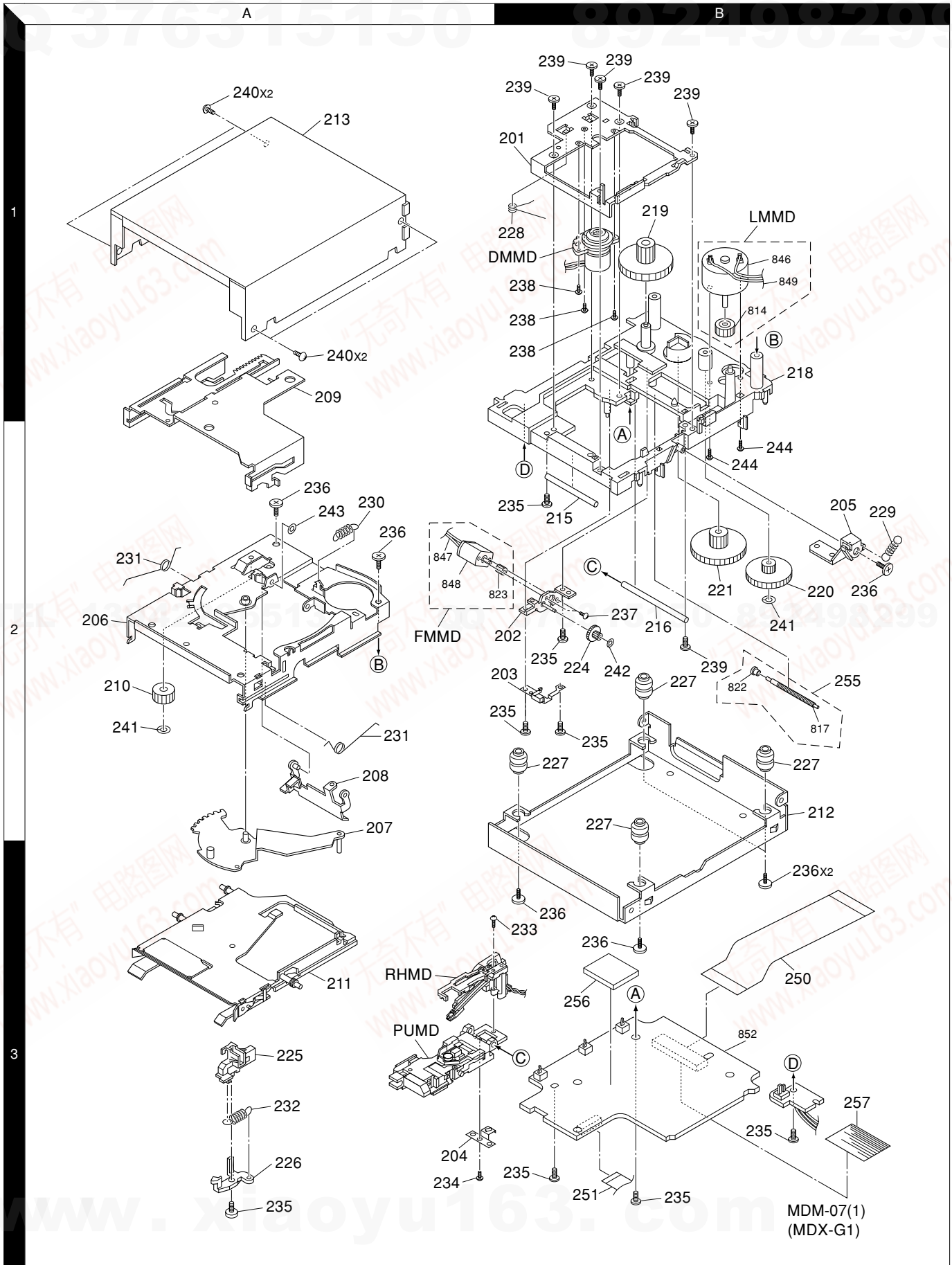


(X09-) (E/6)

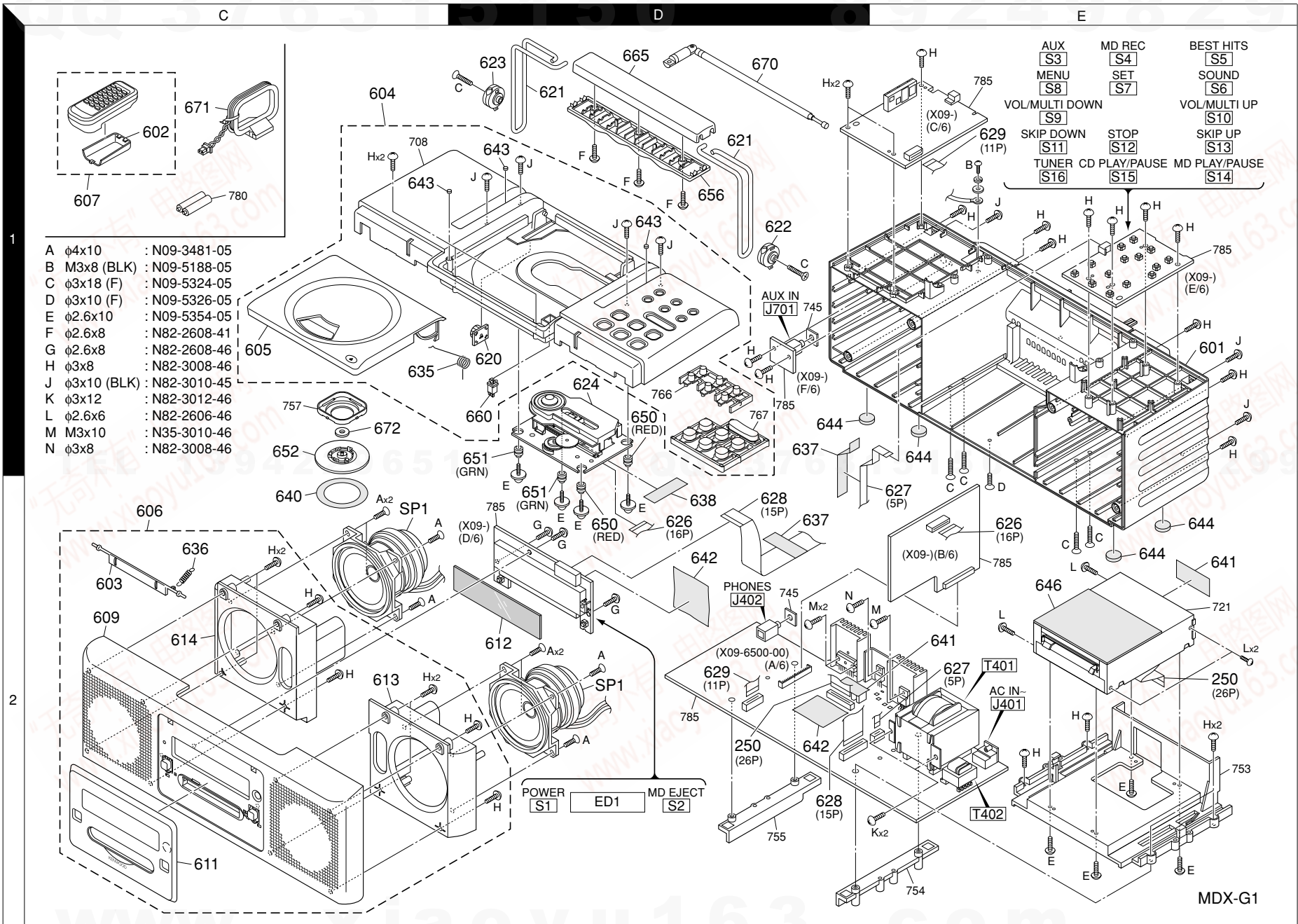


MDX-G1(M) (2/2)

EXPLODED VIEW (MECHANISM)




Parts with exploded numbers larger than 700 are not supplied.





* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
MDX-G1 W:White, S:Silver, Y:Yellow						
601	1E	*	A02-3017-01	PLASTIC CABINET	W	
601	1E	*	A02-3018-01	PLASTIC CABINET	S	
601	1E	*	A02-3019-01	PLASTIC CABINET	Y	
602	1C	*	A09-1229-08	BATTERY COVER		
603	2C	*	A29-1147-04	PANEL		
604	1C	*	A52-0926-01	TOP COVER ASSY	W	
604	1C	*	A52-0938-01	TOP COVER ASSY	S	
604	1C	*	A52-0941-01	TOP COVER ASSY	Y	
605	1C	*	A52-0958-02	DOOR ASSY	W	
605	1C	*	A52-0959-02	DOOR ASSY	S	
605	1C	*	A52-0960-02	DOOR ASSY	Y	
606	2C	*	A60-2044-01	PANEL ASSY	W	
606	2C	*	A60-2083-01	PANEL ASSY	S	
606	2C	*	A60-2084-01	PANEL ASSY	Y	
607	1C	*	A70-1509-05	REMOTE CONTROLLER ASSY		
609	2C	*	A60-2045-01	PANEL	W	
609	2C	*	A60-2081-01	PANEL	S	
609	2C	*	A60-2082-01	PANEL	Y	
611	2C	*	B10-3705-02	FRONT GLASS	W	
611	2C	*	B10-3718-02	FRONT GLASS	S	
611	2C	*	B10-3719-02	FRONT GLASS	Y	
612	2D	*	B11-1535-04	COLOR FILTER		
613	2C	*	B06-2010-02	GRILLE	W	
613	2C	*	B06-2012-02	GRILLE	S	
613	2C	*	B06-2014-02	GRILLE	Y	
614	2C	*	B06-2011-02	GRILLE	W	
614	2C	*	B06-2013-02	GRILLE	S	
614	2C	*	B06-2015-02	GRILLE	Y	
-		*	B58-0966-13	CAUTION CARD		
-		*	B60-5053-00	INSTRUCTION MANUAL		
620	1D	*	D39-0353-05	DAMPER		
621	1D	*	D10-5011-04	ARM		
622	1D	*	D21-2908-03	SHAFT		
623	1D	*	D21-2911-03	SHAFT		
624	1D	*	D40-1734-05	MECHANISM ASSY		
626	2D	*	E35-2894-05	FLAT CABLE		
627	1E,2E	*	E35-2895-05	FLAT CABLE		
628	2D	*	E35-2896-05	FLAT CABLE		
629	2D,1E	*	E35-2897-05	FLAT CABLE		
635	1C	*	G01-4265-04	TORSION COIL SPRING		
636	2C	*	G01-4289-04	EXTENSION SPRING		
637	2D,1E	*	G10-0485-04	NON-WOVEN FABRIC		
638	1D	*	G10-0489-04	NON-WOVEN FABRIC		
640	2C	*	G10-0521-04	NON-WOVEN FABRIC		
641	2E	*	G10-0584-04	NON-WOVEN FABRIC		
642	2D	*	G10-0585-04	NON-WOVEN FABRIC		
643	1D	*	G11-2713-04	CUSHION		
644	1E,2E	*	G11-2833-04	CUSHION		
646	2E	*	G10-0587-04	NON-WOVEN FABRIC		

L : Scandinavia K : USA P : Canada R : Mexico C : China I : Malaysia
Y : PX(Far East,Hawaii) T : England E : Europe G : Germany V : China(Shanghai)
Y : AAFES(Europe) X : Australia Q : Russia H : Korea M : Other Areas  indicates safety critical components .

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
-		*	H12-3523-05	PACKING FIXTURE		
-		*	H12-3524-05	PACKING FIXTURE		
-		*	H21-1506-04	PROTECTION SHEET		
-		*	H25-1642-04	PROTECTION BAG	W	
-		*	H50-4155-04	ITEM CARTON CASE		
-		*	H50-4200-04	ITEM CARTON CASE	S	
-		*	H50-4201-04	ITEM CARTON CASE	Y	
650	2D		J02-1471-05	INSULATOR		
651	2D		J02-1505-05	INSULATOR		
652	1C	*	J11-0873-02	CLAMPER	W	
656	1D	*	J19-6202-02	HOLDER	S	
656	1D	*	J19-6224-02	HOLDER		
656	1D	*	J19-6225-02	HOLDER	Y	
660	1D		J52-0044-05	PUSH LATCH		
665	1D	*	K01-0146-02	HANDLE	WS	
665	1D	*	K01-0152-02	HANDLE	Y	
 T401	2E	*	L07-2985-05	POWER TRANSFORMER		
670	1D		T90-0828-05	ROD ANTENNA		
671	1C		T90-0865-05	LOOP ANTENNA		
672	1C		T99-0654-05	MAGNET		
SP1	2C,2D		T07-0905-05	FULLRANGE		
AUDIO (X09-6500-21)						
D2		*	B30-2601-05	LED(GREEN/RED LED)		
C1			CK73GB1H103K	CHIP C	0.010UF	K
C2			CK73GB1H682K	CHIP C	6800PF	K
C3			CC73GCH1H221J	CHIP C	220PF	J
C4			CE04RW0J220M	ELECTRO	22UF	6.3WV
C5			CE04RW0J470M	ELECTRO	47UF	6.3WV
C6			CC73GCH1H330J	CHIP C	33PF	J
C7 ,8			CE04RW1H010M	ELECTRO	1.0UF	50WV
C10			CE04RW1H100M	ELECTRO	10UF	50WV
C11			CC73GCH1H221J	CHIP C	220PF	J
C20			CK73GB1H472K	CHIP C	4700PF	K
C21			CK73GB1C104K	CHIP C	0.10UF	K
C22			CC73GCH1H101J	CHIP C	100PF	J
C23			CK73GB1H103K	CHIP C	0.010UF	K
C205,206			CE04KW1A101M	ELECTRO	100UF	10WV
C211,212			CK73GB1C104K	CHIP C	0.10UF	K
C213			CC73GCH1H331J	CHIP C	330PF	J
C214			CC73GCH1H221J	CHIP C	220PF	J
C215			CK45FB1H471K	CERAMIC	470PF	K
C216,217			CK73GB1E223K	CHIP C	0.022UF	K
C218			CK73GB1C333K	CHIP C	0.033UF	K
C219			CC73GCH1H331J	CHIP C	330PF	J
C220,221			CE04KW1A101M	ELECTRO	100UF	10WV
C222			CC73GCH1H030C	CHIP C	3.0PF	C

L : Scandinavia K : USA P : Canada R : Mexico C : China I : Malaysia
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PARTS LIST

MDX-G1

* New Parts

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③

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C223			CK73GB1A334K	CHIP C	0.33UF	K
C224			CC73GCH1H100D	CHIP C	10PF	D
C225			CC73GCH1H101J	CHIP C	100PF	J
C226			CQ93FMG1H104J	MYLAR	0.10UF	J
C227			CK73GB1H222K	CHIP C	2200PF	K
C228			CQ93FMG1H223J	MYLAR	0.022UF	J
C229			CK73GB1H472K	CHIP C	4700PF	K
C230			CK73GB1H222K	CHIP C	2200PF	K
C231			CQ93FMG1H102J	MYLAR	1000PF	J
C232			CQ93FMG1H223J	MYLAR	0.022UF	J
C233			CK73GB1E223K	CHIP C	0.022UF	K
C234			CF92FV1H564J	MF-C	0.56UF	J
C234			C91-1582-05	METAL FI	0.56UF	J
C235			CQ93FMG1H122J	MYLAR	1200PF	J
C237			CC73GCH1H470J	CHIP C	47PF	J
C239			CK73GB1C104K	CHIP C	0.10UF	K
C240			CE04KW1A101M	ELECTRO	100UF	10WV
C241			CE04KW1HR33M	ELECTRO	0.33UF	50WV
C242			CC73GCH1H150J	CHIP C	15PF	J
C243			CC73GCH1H120J	CHIP C	12PF	J
C244			CK73GB1H102K	CHIP C	1000PF	K
C245			CE04KW1E470M	ELECTRO	47UF	25WV
C246			CE04KW1A221M	ELECTRO	220UF	10WV
C247			CK73GB1C104K	CHIP C	0.10UF	K
C248			CC73GCH1H470J	CHIP C	47PF	J
C250			CK73GB1E223K	CHIP C	0.022UF	K
C251			CK73GB1H332K	CHIP C	3300PF	K
C252			CK73GB1E223K	CHIP C	0.022UF	K
C255			CK73GB1C104K	CHIP C	0.10UF	K
C256			CC73GCH1H101J	CHIP C	100PF	J
C257-259			CC73GCH1H221J	CHIP C	220PF	J
C261,262			CC73GCH1H100D	CHIP C	10PF	D
C263,264			CC73GCH1H150J	CHIP C	15PF	J
C265			CK45FF1H103Z	CERAMIC	0.010UF	Z
C266			CC73GCH1H680J	CHIP C	68PF	J
C270			CC73GCH1H050C	CHIP C	5.0PF	C
C291			CE04KW1A221M	ELECTRO	220UF	10WV
C293			CE04KW1H4R7M	ELECTRO	4.7UF	50WV
C301			CC73GCH1H470J	CHIP C	47PF	J
C302			CC73GCH1H151J	CHIP C	150PF	J
C303			CK73GB1H102K	CHIP C	1000PF	K
C304			CE04KW1H010M	ELECTRO	1.0UF	50WV
C305			CC73GCH1H220J	CHIP C	22PF	J
C307			CK73FB1C105K	CHIP C	1.0UF	K
C308			CE04KW1H010M	ELECTRO	1.0UF	50WV
C309,310			CK73GB1H153K	CHIP C	0.015UF	K
C311,312			CE04KW1H2R2M	ELECTRO	2.2UF	50WV
C313			CK73GB1C104K	CHIP C	0.10UF	K
C314			CC73GCH1H331J	CHIP C	330PF	J
C315			CE04KW1E470M	ELECTRO	47UF	25WV
C316			CC73GCH1H101J	CHIP C	100PF	J
C317			CK73GB1E223K	CHIP C	0.022UF	K
C318			CE04KW1H2R2M	ELECTRO	2.2UF	50WV
C319			CK73GB1E223K	CHIP C	0.022UF	K
C320			CK73GB1C104K	CHIP C	0.10UF	K

L : Scandinavia

K : USA

P : Canada

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④

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C321			CK73FB1C474K	CHIP C	0.47UF	K
C322			CE04KW1H010M	ELECTRO	1.0UF	50WV
C323			CK73GB1H102K	CHIP C	1000PF	K
C324			CK73GB1H103K	CHIP C	0.010UF	K
C325			CE04KW1E470M	ELECTRO	47UF	25WV
C326,327			CK73FB1C105K	CHIP C	1.0UF	K
C328			CC73GCH1H331J	CHIP C	330PF	J
C329			CK73GB1H103K	CHIP C	0.010UF	K
C330			CC73GCH1H040C	CHIP C	4.0PF	C
C331			CC73GCH1H470J	CHIP C	47PF	J
C332			CE04KW1H100M	ELECTRO	10UF	50WV
C333			CK73GB1H103K	CHIP C	0.010UF	K
C334			CE04KW1E470M	ELECTRO	47UF	25WV
C335			CK73GB1E223K	CHIP C	0.022UF	K
C336			CE04KW1H4R7M	ELECTRO	4.7UF	50WV
C337			CC73GCH1H101J	CHIP C	100PF	J
C338			CC73GCH1H471J	CHIP C	470PF	J
C339			CC73GCH1H101J	CHIP C	100PF	J
C340			CC73GCH1H120J	CHIP C	12PF	J
C341			CC73GCH1H100D	CHIP C	10PF	D
C345			CK73GB1C104K	CHIP C	0.10UF	K
C346			CK73GB1H103K	CHIP C	0.010UF	K
C347			CC73GCH1H331J	CHIP C	330PF	J
C348			CK73GB1H103K	CHIP C	0.010UF	K
C349			CC73GCH1H101J	CHIP C	100PF	J
C350-353			CK73GB1H103K	CHIP C	0.010UF	K
C355			CC73GCH1H101J	CHIP C	100PF	J
C398,399			CK45FB1H102K	CERAMIC	1000PF	K
C401			CE04KW1A332M	ELECTRO	3300UF	10WV
C402			C90-3930-05	ELECTRO	2200UF	25WV
C403			CE04KW1E332M	ELECTRO	3300UF	25WV
C404			CE04KW1C222M	ELECTRO	2200UF	16WV
C405			CE04DW1J101M	ELECTRO	100UF	63WV
C406			CE04KW1J330M	ELECTRO	33UF	63WV
C407			CK73GB1H103K	CHIP C	0.010UF	K
C408			CK73GB1E473K	CHIP C	0.047UF	K
C409			CE04KW1H010M	ELECTRO	1.0UF	50WV
C411			CE04KW1A101M	ELECTRO	100UF	10WV
C413			CC73GCH1H330J	CHIP C	33PF	J
C415			CK73GF1E104Z	CHIP C	0.10UF	Z
C416			CE04KW1A221M	ELECTRO	220UF	10WV
C417,418			CE04KW1E470M	ELECTRO	47UF	25WV
C419			CK73FB1C334K	CHIP C	0.33UF	K
C420		*	CE04RW1A470M	ELECTRO	47UF	10WV
C421			CE04KW1E101M	ELECTRO	100UF	25WV
C422			CE04KW1H100M	ELECTRO	10UF	50WV
C423			CK73GB1E223K	CHIP C	0.022UF	K
C426,427			CE04KW1H2R2M	ELECTRO	2.2UF	50WV
C428,429			CC73GCH1H331J	CHIP C	330PF	J
C430,431			CE04KW1E222M	ELECTRO	2200UF	25WV
C432,433			CC73GCH1H151J	CHIP C	150PF	J
C434,435			CK73GB1H102K	CHIP C	1000PF	K
C437			CE04HW1H010M	NP-ELEC	1.0UF	50WV
C439			CE04KW1A221M	ELECTRO	220UF	10WV
C501			CE04KW1H010M	ELECTRO	1.0UF	50WV

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C502			CE04RW1A101M	ELECTRO 100UF	10WV	
C503			CE04DW0J102M	ELECTRO 1000UF	6.3WV	
C504			CE04RW1H010M	ELECTRO 1.0UF	50WV	
C505			CK73GB1H472K	CHIP C 4700PF	K	
C506			CC45FCH1H680J	CERAMIC 68PF	J	
C510			CE04KW1E470M	ELECTRO 47UF	25WV	
C511-514			CE04KW1H010M	ELECTRO 1.0UF	50WV	
C517,518			CK73GB0J105K	CHIP C 1.0UF	K	
C519,520			CE04KW1H010M	ELECTRO 1.0UF	50WV	
C521,522			CQ93FMG1H222J	MYLAR 2200PF	J	
C523-526			CK73GB1C104K	CHIP C 0.10UF	K	
C527-530			CK73GB1C683K	CHIP C 0.068UF	K	
C531,532			CE04KW1H010M	ELECTRO 1.0UF	50WV	
C535,536			CC45FCH1H01J	CERAMIC 100PF	J	
C537,538			CE04HW1HR22M	NP-ELEC 0.22UF	50WV	
C539			CC45FCH1H01J	CERAMIC 100PF	J	
C540			CE04KW1A101M	ELECTRO 100UF	10WV	
C541,542			CC45FCH1H01J	CERAMIC 100PF	J	
C544			CC45FCH1H01J	CERAMIC 100PF	J	
C560			CC45FCH1H180J	CERAMIC 18PF	J	
C561			CC45FCH1H220J	CERAMIC 22PF	J	
C562			CK73GB0J105K	CHIP C 1.0UF	K	
C563,564			CK45FF1H103Z	CERAMIC 0.010UF	Z	
C565			CQ93FMG1H102J	MYLAR 1000PF	J	
C567			CE04KW1A101M	ELECTRO 100UF	10WV	
C581,582			CQ93FMG1H152J	MYLAR 1500PF	J	
C583,584			CC45FCH1H470J	CERAMIC 47PF	J	
C585,586			CC45FCH1H01J	CERAMIC 100PF	J	
C587,588			CQ93FMG1H562J	MYLAR 5600PF	J	
C589,590			CQ93FMG1H122J	MYLAR 1200PF	J	
C591,592			CC45FCH1H221J	CERAMIC 220PF	J	
C593,594			CE04KW1H2R2M	ELECTRO 2.2UF	50WV	
C595,596			CE04KW1A101M	ELECTRO 100UF	10WV	
C597,598			CC73GCH1H050C	CHIP C 5.0PF	C	
C599,600			CC73GCH1H680J	CHIP C 68PF	J	
C702,703			CC73GCH1H01J	CHIP C 100PF	J	
C750-753			CC73GCH1H221J	CHIP C 220PF	J	
C754,755			CK73GB0J105K	CHIP C 1.0UF	K	
C756,757			CC73GCH1H151J	CHIP C 150PF	J	
C758,759			CK73GB0J105K	CHIP C 1.0UF	K	
C760-762			CK73GB1E223K	CHIP C 0.022UF	K	
C800			CC73GCH1H330J	CHIP C 33PF	J	
C801			CK73GB1C104K	CHIP C 0.10UF	K	
C802			CE04RW0J470M	ELECTRO 47UF	6.3WV	
C810,811			CC73GCH1H221J	CHIP C 220PF	J	
C814-817			CK73GB1H103K	CHIP C 0.010UF	K	
C818			CC73GCH1H470J	CHIP C 47PF	J	
C819			CC73GCH1H01J	CHIP C 100PF	J	
C820			CK73GB1H102K	CHIP C 1000PF	K	
C821			CC73GCH1H01J	CHIP C 100PF	J	
C822,823			CK73GB0J105K	CHIP C 1.0UF	K	
C824			CK73GB1C104K	CHIP C 0.10UF	K	
C825			CK73GB1H103K	CHIP C 0.010UF	K	
C826			CK73GB1C104K	CHIP C 0.10UF	K	
C827			CK73GB1H103K	CHIP C 0.010UF	K	

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Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C850,851			CK73GB1C104K	CHIP C 0.10UF	K	
C852,853			CK73GF1A105Z	CHIP C 1.0UF	Z	
C854			CK73GB1C104K	CHIP C 0.10UF	K	
C855			CK73GB1H103K	CHIP C 0.010UF	K	
C856-861			CC73GCH1H101J	CHIP C 100PF	J	
CN1			E40-4725-05	FLAT CABLE CONNECTOR		
CN2			E40-8495-05	FLAT CABLE CONNECTOR		
CN21			E40-8328-05	FLAT CABLE CONNECTOR		
CN22			E40-3250-05	PIN ASSY		
CN23			E40-4974-05	PIN ASSY		
CN24			E40-9834-05	SOCKET FOR PIN ASSY		
CN25			E40-4974-05	PIN ASSY		
CN26			E40-4373-05	PIN ASSY		
CN32			E40-8717-05	PIN ASSY		
CN33		*	E40-8499-05	FLAT CABLE CONNECTOR		
CN34			E40-3246-05	PIN ASSY		
CN35			E40-4373-05	PIN ASSY		
CN41,42			E40-3299-05	PIN ASSY		
CN51			E40-8461-05	FLAT CABLE CONNECTOR		
CN52			E40-8481-05	FLAT CABLE CONNECTOR		
CN53			E40-8476-05	FLAT CABLE CONNECTOR		
CN54		*	E40-8479-05	FLAT CABLE CONNECTOR		
CN55			E40-9851-05	PIN ASSY		
J401			E03-0374-05	AC INLET		
J402			E11-0399-05	MINIATURE PHONE JACK(7P)		
J701			E11-0353-05	MINIATURE PHONE JACK		
CF31,32			L72-0596-05	CERAMIC FILTER		
CF33			L72-0623-05	CERAMIC FILTER		
L201			L40-1001-17	SMALL FIXED INDUCTOR(10UH,K)		
L301			L39-1384-05	COMBINATION COIL		
L302			L30-0974-05	AM IFT		
L303			L40-1091-82	SMALL FIXED INDUCTOR(1.0UH)		
L304,305			L92-0081-05	CHIP FERRITE		
L501,502			L92-0501-05	FERRITE CORE		
L503,504			L92-0089-05	CHIP FERRITE		
L505			L92-0501-05	FERRITE CORE		
L506			L92-0089-05	CHIP FERRITE		
L600,601			L92-0081-05	CHIP FERRITE		
L860			L92-0501-05	FERRITE CORE		
L862			L40-1001-17	SMALL FIXED INDUCTOR(10UH,K)		
L863			L92-0017-05	FERRITE CORE		
T402			L07-2980-05	POWER TRANSFORMER		
X221			L77-2338-05	CRYSTAL RESONATOR(33.8688MHZ)		
X301			L77-2232-05	CRYSTAL RESONATOR		
X501			L78-0294-05	RESONATOR (10.000M)		
X502			L77-2173-05	CRYSTAL RESONATOR(32.768KHZ)		
R1 ,2			RK73GB1J221J	CHIP R 220	J	1/16W
R5			RK73GB1J102J	CHIP R 1.0K	J	1/16W
R9			RK73GB1J103J	CHIP R 10K	J	1/16W
R14			RK73GB1J102J	CHIP R 1.0K	J	1/16W
R16			RK73GB1J102J	CHIP R 1.0K	J	1/16W
R23			RK73FB2A3R3J	CHIP R 3.3	J	1/10W
R201			RK73GB1J683J	CHIP R 68K	J	1/16W
R202-205			RK73GB1J333J	CHIP R 33K	J	1/16W

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PARTS LIST

MDX-G1

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⑦

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
R206			RK73GB1J683J	CHIP R	68K	J 1/16W
R210			RK73GB1J1R0J	CHIP R	1	J 1/16W
R211,212			RK73GB1J334J	CHIP R	330K	J 1/16W
R213			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R214			RK73GB1J101J	CHIP R	100	J 1/16W
R215			RK73GB1J513J	CHIP R	51K	J 1/16W
R216			RK73GB1J393J	CHIP R	39K	J 1/16W
R217			RK73GB1J101J	CHIP R	100	J 1/16W
R218,219			RK73GB1J473J	CHIP R	47K	J 1/16W
R220			RK73GB1J104J	CHIP R	100K	J 1/16W
R221			RK73GB1J100J	CHIP R	10	J 1/16W
R223,224			RK73GB1J562J	CHIP R	5.6K	J 1/16W
R225			RK73GB1J222J	CHIP R	2.2K	J 1/16W
R226			RK73GB1J101J	CHIP R	100	J 1/16W
R227			RK73GB1J473J	CHIP R	47K	J 1/16W
R228			RK73GB1J221J	CHIP R	220	J 1/16W
R230			RK73GB1J2R2J	CHIP R	2.2	J 1/16W
R232			RK73GB1J104J	CHIP R	100K	J 1/16W
R233			RK73GB1J563J	CHIP R	56K	J 1/16W
R234			RK73GB1J333J	CHIP R	33K	J 1/16W
R240			RK73GB1J100J	CHIP R	10	J 1/16W
R242			RK73GB1J331J	CHIP R	330	J 1/16W
R243			RK73GB1J105J	CHIP R	1.0M	J 1/16W
R245			RK73GB1J910J	CHIP R	91	J 1/16W
R248			RK73GB1J103J	CHIP R	10K	J 1/16W
R250			RK73GB1J473J	CHIP R	47K	J 1/16W
R251			RK73GB1J223J	CHIP R	22K	J 1/16W
R252			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R254			RK73GB1J753J	CHIP R	75K	J 1/16W
R255			RK73GB1J682J	CHIP R	6.8K	J 1/16W
R256			RK73GB1J274J	CHIP R	270K	J 1/16W
R257			RK73GB1J103J	CHIP R	10K	J 1/16W
R258			RK73GB1J104J	CHIP R	100K	J 1/16W
R259			RK73GB1J393J	CHIP R	39K	J 1/16W
R260			RK73GB1J154J	CHIP R	150K	J 1/16W
R261			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R262			RK73GB1J101J	CHIP R	100	J 1/16W
R263-265			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R266-269			RK73GB1J101J	CHIP R	100	J 1/16W
R294			RK73GB1J104J	CHIP R	100K	J 1/16W
R295,296			RK73GB1J472J	CHIP R	4.7K	J 1/16W
R301			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R304			RK73GB1J101J	CHIP R	100	J 1/16W
R305			RK73GB1J511J	CHIP R	510	J 1/16W
R306			RK73GB1J101J	CHIP R	100	J 1/16W
R307			RK73GB1J103J	CHIP R	10K	J 1/16W
R308			RK73GB1J223J	CHIP R	22K	J 1/16W
R309,310			RK73GB1J512J	CHIP R	5.1K	J 1/16W
R311			RK73GB1J222J	CHIP R	2.2K	J 1/16W
R312			RK73GB1J363J	CHIP R	36K	J 1/16W
R313			RK73GB1J273J	CHIP R	27K	J 1/16W
R315			RK73GB1J681J	CHIP R	680	J 1/16W
R316			RD14NB2E181J	RD	180	J 1/4W
R317			RK73GB1J221J	CHIP R	220	J 1/16W
R318			RD14NB2E121J	RD	120	J 1/4W

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R320			RK73GB1J104J	CHIP R	100K	J 1/16W
R321			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R323			RD14NB2E331J	RD	330	J 1/4W
R324			RK73GB1J101J	CHIP R	100	J 1/16W
R325			RK73GB1J562J	CHIP R	5.6K	J 1/16W
R326,327			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R328			RK73GB1J222J	CHIP R	2.2K	J 1/16W
R329			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R330			RK73GB1J103J	CHIP R	10K	J 1/16W
R331			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R332-336			RK73GB1J332J	CHIP R	3.3K	J 1/16W
R337			RK73GB1J222J	CHIP R	2.2K	J 1/16W
R350			RK73GB1J680J	CHIP R	68	J 1/16W
R351			RK73GB1J332J	CHIP R	3.3K	J 1/16W
R352			RK73GB1J681J	CHIP R	680	J 1/16W
R353			RK73GB1J331J	CHIP R	330	J 1/16W
R354			RK73GB1J680J	CHIP R	68	J 1/16W
R355			RK73GB1J101J	CHIP R	100	J 1/16W
R356			RK73GB1J105J	CHIP R	1.0M	J 1/16W
R401			RK73GB1J473J	CHIP R	47K	J 1/16W
R404			RK73GB1J334J	CHIP R	330K	J 1/16W
R406			RS14KB3A470J	FL-PROOF RS	47	J 1W
R420,421			RK73GB1J302J	CHIP R	3.0K	J 1/16W
R422			RK73GB1J111J	CHIP R	110	J 1/16W
R501			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R502			RK73GB1J103J	CHIP R	10K	J 1/16W
R504			RK73GB1J104J	CHIP R	100K	J 1/16W
R505			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R506			RK73GB1J103J	CHIP R	10K	J 1/16W
R507			RK73GB1J2R2J	CHIP R	2.2	J 1/16W
R530,531			RK73GB1J221J	CHIP R	220	J 1/16W
R532			RK73GB1J475J	CHIP R	4.7M	J 1/16W
R533			RK73GB1J104J	CHIP R	100K	J 1/16W
R541			RK73GB1J221J	CHIP R	220	J 1/16W
R544,545			RK73GB1J473J	CHIP R	47K	J 1/16W
R547			RK73GB1J473J	CHIP R	47K	J 1/16W
R584			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R700,701			RK73GB1J222J	CHIP R	2.2K	J 1/16W
R702,703			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R704			RK73GB1J221J	CHIP R	220	J 1/16W
R705			RK73GB1J332J	CHIP R	3.3K	J 1/16W
R706			RK73GB1J103J	CHIP R	10K	J 1/16W
R760,761			RK73GB1J102J	CHIP R	1.0K	J 1/16W
R762,763			RK73GB1J104J	CHIP R	100K	J 1/16W
R773,774			RK73GB1J271J	CHIP R	270	J 1/16W
R777			RK73GB1J221J	CHIP R	220	J 1/16W
R779,780			RK73GB1J273J	CHIP R	27K	J 1/16W
R781,782			RK73GB1J123J	CHIP R	12K	J 1/16W
R783			RK73GB1J111J	CHIP R	110	J 1/16W
R784,785			RK73GB1J221J	CHIP R	220	J 1/16W
R786			RS14KB3D181J	FL-PROOF RS	180	J 2W
R801			RK73GB1J103J	CHIP R	10K	J 1/16W
R802			RK73GB1J102J	CHIP R	1.0K	J 1/16W
VR31			R12-3100-05	TRIMMING POT.(10K)		
W21			R92-1252-05	CHIP R	0 OHM	

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W271,272 W516 W850			R92-1252-05 R92-1252-05 R92-1252-05	CHIP R 0 OHM CHIP R 0 OHM CHIP R 0 OHM		
△ K401 S1 -16			S76-0102-05 S70-0086-05	MAGNETIC RELAY TACT SWITCH		
D1 D1 D1 D201 D201			HZS6.2N(B2) MTZJ6.2(B) RD6.2ES(B) HSS104A 1SS133	ZENER DIODE ZENER DIODE ZENER DIODE DIODE DIODE		
D202,203 D202,203 D202,203 D229 D229			DA204U MA143A 1SS302 DA204U MA143A	DIODE DIODE DIODE DIODE DIODE		
D229 D301,302 D301,302 D301,302 D303			1SS302 DA204U MA143A 1SS302 HZS5.1N(B2)	DIODE DIODE DIODE DIODE ZENER DIODE		
D303 D303 △ D405,406 D407,408 D407,408			MTZJ5.1(B) RD5.1ES(B) D2SBA20F03 HSS104A 1SS133	ZENER DIODE ZENER DIODE DIODE DIODE DIODE		
△ D410-415 △ D410-415 D416-418 D416-418 D419			S5688B 1T2 HSS104A 1SS133 1T2	DIODE DIODE DIODE DIODE DIODE		
△ D420-426 △ D420-426 △ D427-430 △ D427-430 △ D431,432			HSS104A 1SS133 S5688B 1T2 HZS20N(B2)	DIODE DIODE DIODE DIODE ZENER DIODE		
D431,432 D431,432 D433 D433 D433			MTZJ20(B) RD20ES(B) HZS4.7N(B2) MTZJ4.7(B) RD4.7ES(B)	ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE		
D434 D434 D434 D435 D435			HZS2.7N(B2) MTZJ2.7(B) RD2.7ES(B) HZS3.9N(B2) MTZJ3.9(B)	ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE		
D435 D501 D502-504 D502-504 ED1			RD3.9ES(B) 1SS402 HSS104A 1SS133 * HNA-15SM01T	ZENER DIODE DIODE DIODE DIODE FLUORESCENT INDICATOR TUBE		
IC1 IC21 IC22 IC23			LC75710NED AN8806SBM MN662748RPMFA AN4801SB-E1	MOS-IC ANALOGUE IC MOS-IC ANALOGUE IC		

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△ IC25 IC31 IC32 △ IC41 △ IC42			BA05FP TA2099N LC72131 XC62HR5102P LA4262	ANALOGUE IC ANALOGUE IC MOS-IC ANALOGUE IC ANALOGUE IC		
△ IC43 IC44 IC51 △ IC52 IC53			TA7805S AN80T03 * M30622MCAB30FP * S-80840ANY * LC75343M	ANALOGUE IC ANALOGUE IC MI-COM IC ANALOGUE IC ANALOGUE IC		
IC54 IC56 Q1 Q2 Q8			HD74LV1G08A NJM4565MD 2SC4081(R,S) HN1C01F KTC3199(Y,GR)	MOS-IC IC(OP AMP X2) TRANSISTOR DUAL TRANSISTOR TRANSISTOR		
Q8 Q201 Q204 Q205 Q301			2SC2785(F,E) 2SA1577(Q,R) 2SA1577(Q,R) 2SC4081(R,S) DTA114EUA	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR		
Q301 Q399 △ Q401 △ Q402			UN5111 2SC4081(R,S) 2SC3940A(R,S) 2SD1768S KTC3199(Y,GR)	DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
Q402 Q403 Q403 Q404,405 Q406			2SC2785(F,E) KTA1267(Y,GR) 2SA1175(F,E) 2SC2878(B) DTA124ESA	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR		
A1 A301			W02-2734-05 W02-2786-05	OPTIC RECEIVING MODULE FM FRONT-END ASSY		
CONTROL (X33-1260-00)						
C1 C2 ,3 C5 C7 C8			CK73GB1C104K CE32AP0J101M CK73GB1C104K CK73GB0J474K CK73GF1E104Z	CHIP C CHIP EL CHIP C CHIP C CHIP C	0.10UF 100UF 0.10UF 0.47UF 0.10UF	K 6.3WV K K Z
C8 C9 C10 C11 C12			CK73GF1H104Z CK73GB1H472K CC73GCH1H101J CK73GB0J474K CK73GB1E153K	CHIP C CHIP C CHIP C CHIP C CHIP C	0.10UF 4700PF 100PF 0.47UF 0.015UF	Z K J K K
C13 C13 C14 C18 C22 ,23			CK73GF1E104Z CK73GF1H104Z CC73GCH1H100D CK73GB1E103K CK73GF1E104Z	CHIP C CHIP C CHIP C CHIP C CHIP C	0.10UF 0.10UF 10PF 0.010UF 0.10UF	Z Z D K Z
C22 ,23 C30 C31 C32 C35			CK73GF1H104Z CE32AP1C100M CE32AP0J101M CK73GB1H222K C92-0232-05	CHIP C CHIP EL CHIP EL CHIP C ELECTRO	0.10UF 10UF 100UF 2200PF 10UF	Z 16WV 6.3WV K 16WV
C36			CK73GF1E104Z	CHIP C	0.10UF	Z

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PARTS LIST

MDX-G1

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C36			CK73GF1H104Z	CHIP C 0.10UF	Z	
C37			CK73GB1H222K	CHIP C 2200PF	K	
C38			CK73GF1E104Z	CHIP C 0.10UF	Z	
C38			CK73GF1H104Z	CHIP C 0.10UF	Z	
C39			C92-0232-05	ELECTRO 10UF	16WV	
C40			C91-1597-05	CERAMIC 4.7UF	Z	
C41			C93-0032-05	CHIP C 10UF	10WV	
C42 ,43			CK73GB1H471K	CHIP C 470PF	K	
C45			CE32AP0J101M	CHIP EL 100UF	6.3WV	
C46 -48			CK73GF1E104Z	CHIP C 0.10UF	Z	
C46 -48			CK73GF1H104Z	CHIP C 0.10UF	Z	
C51			C92-0232-05	ELECTRO 10UF	16WV	
C52			CK73GF1E104Z	CHIP C 0.10UF	Z	
C52			CK73GF1H104Z	CHIP C 0.10UF	Z	
C54			CK73GB1E223K	CHIP C 0.022UF	K	
C55			CK73GB1H102K	CHIP C 1000PF	K	
C56			CK73GF1A105Z	CHIP C 1.0UF	Z	
C57			CK73GB1C104K	CHIP C 0.10UF	K	
C58			CK73GB1E103K	CHIP C 0.010UF	K	
C59			CK73GB1E223K	CHIP C 0.022UF	K	
C60			CE32AP1C100M	CHIP EL 10UF	16WV	
C62			CK73GB1C104K	CHIP C 0.10UF	K	
C63			CK73GB1E103K	CHIP C 0.010UF	K	
C64			CK73GB1E223K	CHIP C 0.022UF	K	
C65			CK73GB1A224K	CHIP C 0.22UF	K	
C66			CK73GF1A105Z	CHIP C 1.0UF	Z	
C67			CK73GB1H472K	CHIP C 4700PF	K	
C68			CK73GB1C683K	CHIP C 0.068UF	K	
C69			CK73GB1E223K	CHIP C 0.022UF	K	
C71 ,72			CK73GF1E104Z	CHIP C 0.10UF	Z	
C71 ,72			CK73GF1H104Z	CHIP C 0.10UF	Z	
C73 ,74			CK73GF1A105Z	CHIP C 1.0UF	Z	
C75			CK73GF1E104Z	CHIP C 0.10UF	Z	
C75			CK73GF1H104Z	CHIP C 0.10UF	Z	
C76			CK73GB0J474K	CHIP C 0.47UF	K	
C80			CE32AP0J101M	CHIP EL 100UF	6.3WV	
C81			CK73GF1E104Z	CHIP C 0.10UF	Z	
C81			CK73GF1H104Z	CHIP C 0.10UF	Z	
C82 -85			CK73GB1H152K	CHIP C 1500PF	K	
C86 -89			CC73GCH1H391J	CHIP C 390PF	J	
CN1			E40-8401-05	FLAT CABLE CONNECTOR		
CN3			E40-8687-05	FLAT CABLE CONNECTOR		
L1 -4			L79-1216-05	LINE FILTER		
L1 -4			L92-0075-05	CHIP FERRITE		
L8			L79-1216-05	LINE FILTER		
L8			L92-0075-05	CHIP FERRITE		
X1			L77-2328-05	CRYSTAL OSCILLATOR(16.9344MHZ)		
X2			L78-0722-05	OSCILLATOR (10MHZ)		
R3 -6			RK73GB1J221J	CHIP R 220	J 1/16W	
R8 -10			RK73GB1J103J	CHIP R 10K	J 1/16W	
R12			RK73GB1J3R3J	CHIP R 3.3	J 1/16W	
R14			RK73GB1J104J	CHIP R 100K	J 1/16W	
R15			RK73GB1J684J	CHIP R 680K	J 1/16W	

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R16			RK73GB1J101J	CHIP R 100	J 1/16W	
R17			RK73GB1J102J	CHIP R 1.0K	J 1/16W	
R18			RK73GB1J332J	CHIP R 3.3K	J 1/16W	
R19			RK73GB1J102J	CHIP R 1.0K	J 1/16W	
R20			RK73GB1J151J	CHIP R 150	J 1/16W	
R21 ,22			RK73GB1J103J	CHIP R 10K	J 1/16W	
R23			RK73GB1J104J	CHIP R 100K	J 1/16W	
R24 -26			RK73GB1J101J	CHIP R 100	J 1/16W	
R30			R92-1969-05	METAL GLAZE 200	F 1/10W	
R31			R92-1970-05	METAL GLAZE 360	F 1/16W	
R35			RK73GB1J1R0J	CHIP R 1	J 1/16W	
R36 ,37			RK73GB1J101J	CHIP R 100	J 1/16W	
R39 ,40			RK73GB1J471J	CHIP R 470	J 1/16W	
R41			RK73GB1J221J	CHIP R 220	J 1/16W	
R42			RK73GB1J133J	CHIP R 13K	J 1/16W	
R43			RK73GB1J183J	CHIP R 18K	J 1/16W	
R45			RK73GB1J332J	CHIP R 3.3K	J 1/16W	
R46			RK73GB1J4R7J	CHIP R 4.7	J 1/16W	
R47 ,48			RK73GB1J473J	CHIP R 47K	J 1/16W	
R49			RK73GB1J472J	CHIP R 4.7K	J 1/16W	
R50			RK73GB1J101J	CHIP R 100	J 1/16W	
R51			RK73GB1J102J	CHIP R 1.0K	J 1/16W	
R52 -55			RK73GB1J474J	CHIP R 470K	J 1/16W	
R56 -58			RK73GB1J473J	CHIP R 47K	J 1/16W	
R59 ,60			RK73GB1J103J	CHIP R 10K	J 1/16W	
R62			RK73GB1J473J	CHIP R 47K	J 1/16W	
R64			RK73GB1J473J	CHIP R 47K	J 1/16W	
R65 ,66			RK73GB1J101J	CHIP R 100	J 1/16W	
R67 -69			RK73GB1J473J	CHIP R 47K	J 1/16W	
R70			RK73GB1J3R3J	CHIP R 3.3	J 1/16W	
R71			RK73GB1J563J	CHIP R 56K	J 1/16W	
R72 ,73			RK73GB1J133J	CHIP R 13K	J 1/16W	
R75 ,76			RK73GB1J104J	CHIP R 100K	J 1/16W	
R77			RK73GB1J103J	CHIP R 10K	J 1/16W	
R78			RK73GB1J101J	CHIP R 100	J 1/16W	
R79			RK73GB1J561J	CHIP R 560	J 1/16W	
R80			RK73GB1J101J	CHIP R 100	J 1/16W	
R82			RK73GB1J101J	CHIP R 100	J 1/16W	
R83 ,84			RK73GB1J103J	CHIP R 10K	J 1/16W	
R85			RK73GB1J222J	CHIP R 2.2K	J 1/16W	
R86			RK73GB1J474J	CHIP R 470K	J 1/16W	
R87			RK73GB1J335J	CHIP R 3.3M	J 1/16W	
R88			RK73GB1J474J	CHIP R 470K	J 1/16W	
R89			RK73GB1J472J	CHIP R 4.7K	J 1/16W	
R93			RK73GB1J472J	CHIP R 4.7K	J 1/16W	
R94			RK73GB1J681J	CHIP R 680	J 1/16W	
R95			RK73GB1J472J	CHIP R 4.7K	J 1/16W	
R96			RK73GB1J104J	CHIP R 100K	J 1/16W	
R97			R92-1853-05	CHIP-RN 1	1/4W	
R98			R92-1854-05	RN 2.2	K 1/2W	
R99			RK73GB1J103J	CHIP R 10K	J 1/16W	
R100			RK73GB1J473J	CHIP R 47K	J 1/16W	
R101-103			RK73GB1J102J	CHIP R 1.0K	J 1/16W	
R112,113			RK73GB1J223J	CHIP R 22K	J 1/16W	
R114,115			RK73GB1J104J	CHIP R 100K	J 1/16W	

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R116			RK73GB1J1R0J	CHIP R 1 J 1/16W		
R117,118			RK73GB1J183J	CHIP R 18K J 1/16W		
R119,120			RK73GB1J104J	CHIP R 100K J 1/16W		
R121			RK73GB1J183J	CHIP R 18K J 1/16W		
R122,123			RK73GB1J104J	CHIP R 100K J 1/16W		
R124-126			RK73GB1J183J	CHIP R 18K J 1/16W		
R127,128			RK73GB1J104J	CHIP R 100K J 1/16W		
R129			RK73GB1J514J	CHIP R 510K J 1/16W		
W2 -6			R92-0679-05	CHIP R 0 OHM		
S1			S68-0133-05	PUSH SWITCH		
S2 ,3			S64-0052-05	LEVER SWITCH		
S4			S68-0132-05	PUSH SWITCH		
S5			S64-0052-05	LEVER SWITCH		
D1 ,2			FS1J6TP	DIODE		
D3 ,4			MA111	DIODE		
D5 ,6			S1B	DIODE		
IC1			CXD2662R	MOS-IC		
IC2			CXA2523AR	IC(RF SERVO)		
IC2			CXA2523AR*	IC		
IC3			HD6432227N14FA	IC		
IC4			BA5984FP	IC(CD POWER DRIVER)		
IC5			LC32S4400T-10	IC		
IC6			RC1117ST	IC		
IC7			BR24C02F	IC(E2PROM)		
IC7			S-24C02BFJ-TB	IC(MEMORY IC)		
IC8			BD7910FV	MOS-IC		
IC10			AK4550VT	MOS-IC		
IC11			C6006AZ	IC(CLOCK GENERATOR IC)		
Q1			UMW1N	TRANSISTOR		
Q2			2SA1576A(R,S)	TRANSISTOR		
Q3			2SB798-DL	TRANSISTOR		
Q4			DTA144EUA	DIGITAL TRANSISTOR		
Q5 ,6			DTC114YUA	DIGITAL TRANSISTOR		
Q7			DTA124EUA	DIGITAL TRANSISTOR		
Q8			DTC124EUA	DIGITAL TRANSISTOR		
Q9			2SA1576A(R,S)	TRANSISTOR		
Q10			DTC124EUA	DIGITAL TRANSISTOR		
Q11			DTA144EUA	DIGITAL TRANSISTOR		
MECHANISM (D40-1715-05)						
201	1B		A10-3531-08	CHASSIS TU		
202	2B		J19-6125-08	BRACKET ASSY		
203	2B		G02-1716-08	FLAT SPRING THRUST		
204	3A		D13-2510-08	RACK GEAR		
205	2B		D10-3958-08	LEVER LIMIT		
206	2A		A11-1189-08	SUB CHASSIS ASSY		
207	2A		D10-3959-08	ARM ASSY MAIN		
208	2A		D10-3961-08	LEVER ASSY HEAD		
209	1A		D10-3963-08	SLIDER MAIN		
210	2A		D13-2511-08	GEAR FINAL		
211	3A		J19-6127-08	HOLD ASSY		
212	2B		A15-0106-08	FRAME		
213	1A		F11-0503-08	SHIELD CASE		
215	2B		D10-3982-08	ROD SUB		
216	2B		D10-3957-08	ROD		

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218	1B		A11-1187-08	SUB CHASSIS ASSY,TU		
219	1B		D13-2504-08	GEAR LOAD A		
220	2B		D13-2505-08	GEAR LOAD B		
221	2B		D13-2516-08	GEAR LOAD C		
224	2B		D13-2509-08	GEAR INTERMEDIATE		
225	3A		D10-3964-08	SLIDER LOAD		
226	3A		D10-3965-08	ARM LOAD		
227	2B		J02-1492-08	INSULATOR		
228	1B		G01-4230-08	TORSION SPRING SPM		
229	2B		G01-4231-08	TENSION SPRING		
230	2A		G01-4235-08	TENSION SPRING		
231	2A		G01-4233-08	TORSION SPRING		
232	3A		G01-4234-08	TENSION SPRING		
233	3B		N39-1745-46	SCREW M1.7X4.5		
234	3A		N09-3104-05	SCREW M1.7X2		
235	3A,2B		N09-3279-05	SCREW M1.7X3		
236	2A,2B		N09-5113-08	SCREW 1.7X7		
237	2B		N09-5229-08	SCREW 1.4X1.8		
238	1B		N09-5230-08	SCREW 1.4X2.2		
239	1B,2B		N09-5231-08	SCREW 1.7X4		
240	1A		N86-2004-46	SCREW 2X4		
241	2A,2B		N19-0366-04	FLAT WASHER 2.1X4X0.5		
242	2B		N19-1511-08	FLAT WASHER 2.5X0.9X0.25		
243	2A		N19-1171-04	FLAT WASHER 1.6X3.5X0.25		
244	2B		N09-5285-08	SCREW M1.7X4.5		
250	3B		E35-2824-08	FLAT CABLE		
251	3B		E35-2348-18	FLAT CABLE PU,21P		
255	2B		D13-2506-08	GEAR ASSY		
256	3B		G16-1236-08	SHEET		
257	3B		G11-2825-08	TAPE		
DMMD	1B		T42-0983-05	MOTOR ASSY		
FMMD	2A		T42-0985-08	MOTOR ASSY		
LMMD	1B		T42-0984-08	MOTOR ASSY FEED		
PUMD	3A		T25-0085-05	PICKUP LOAD		
RHMD	3A		T30-0027-05	RECORD HEAD		

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PARTS LIST

MDX-G1

MDX-G1

SPECIFICATIONS

Amplifier section

Rated output power during STEREO operation
1kHz, 10%, 4Ω 3.5 W + 3.5 W

Tuner section

FM tuner
Tuning frequency range 87.5 MHz ~ 108 MHz
AM tuner
Tuning frequency range 531 kHz ~ 1,602 kHz

MD Recorder section

Laser wave length 765 to 805 nm
Laser power class Class 3B
Laser Semiconductor laser
Recording method Field modulating overwriting
Audio compression method ATRAC, ATRAC3
D/A conversion 1 Bit
Wow & flutter Unmeasurable limit

CD Player section

Laser wave length 770 to 795 nm
Laser power class Class 3A
Laser Semiconductor laser
D/A conversion 1 Bit
Over sampling frequency 8 fs (352.8 kHz)
Frequency response 20 Hz to 20 kHz
Wow & flutter Unmeasurable limit

Speakers

Enclosures Bass-reflex type
Speaker units 80 mm, cone type

General

Power consumption 35 W
Dimensions W : 386 mm (16-1/8")
H : 146 mm (5-3/4")
D : 189 mm (7-7/16")
Weight (net) 5.6 kg (12.3lb)



KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

- Sufficient performance may not be exhibited at extremely cold locations (Where water freezes).

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